

# Service Manual

Section 8 (87)

Climate unit  
(Heater unit)

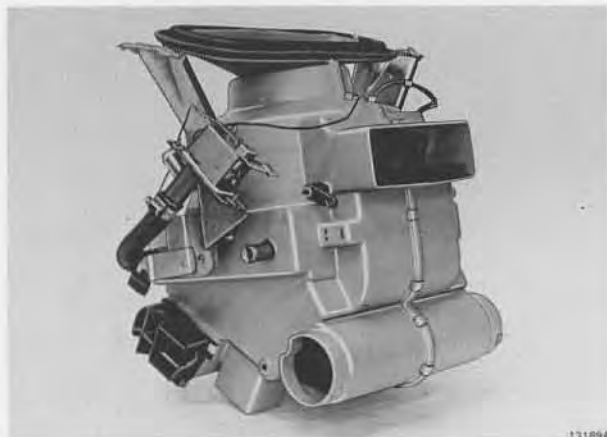
240, 260  
1975–

## Repairs and maintenance

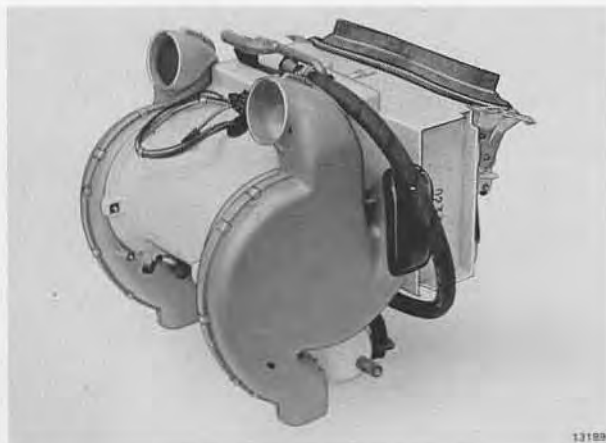
# VOLVO

# Heater unit

This manual deals with the repair and maintenance of the standard and combined (CU) heating systems.



Standard system (except USA-Canada)



Combined unit (CU) (USA-Canada)

TP 30282/2  
4500.12.83  
UK/USA  
Printed in USA

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### Charts

- A. Heater controls, standard unit
- B. Heater controls, CU
- C. Standard heater unit
- D. Heater housing, standard unit
- E. Combined heater unit, CU
- F. Heater housing, CU
- G. Hole template, standard unit
- H. Conversion table - metric/USA standard

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This manual deals with heater units only. Air conditioning is dealt with in another manual.

Volvos are sold in versions adapted for different markets. These adaptations depend on many factors including legal, taxation and market requirements.

This manual may therefore show illustrations and text which do not apply to cars in your country.

## Standard unit (except USA-Canada)

### A. Control panel and/or cable, replacement



#### Disconnect

- the ground lead from battery

#### Remove:

- side panels and sound proofing on both sides
- radio (if installed).

A2

Remove the centre control panel and front panel on central console

A3

Remove the screws securing the control panel mounting

Pull the mounting forward somewhat.

A4

#### Remove:

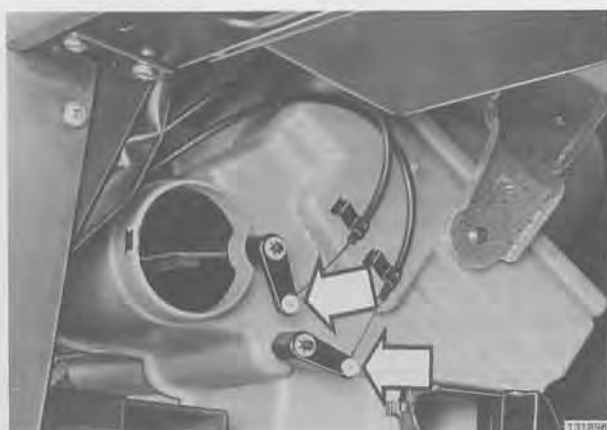
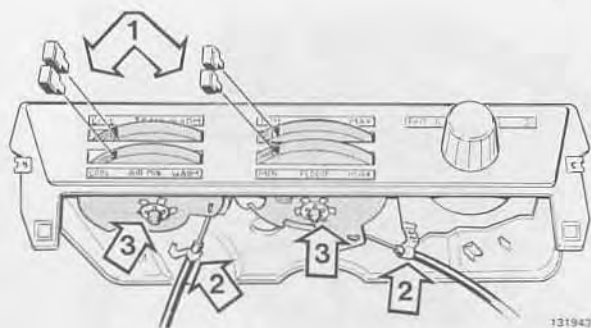
- knob (1) on the control where the cable is to be replaced
- cable sheath clip (2)
- locking washer (3)

A5

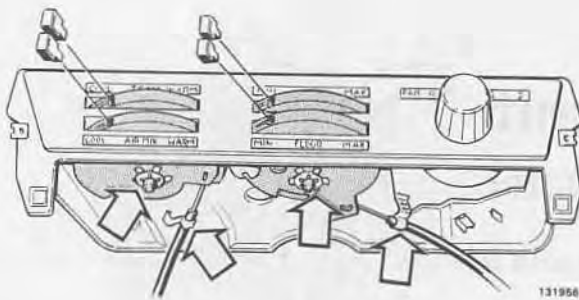
Slacken the disc and unhook the cable

A6

Disconnect the control cable from the shutter



A7



**Install:**

- cable and disc
- washer
- cable sheath clip
- control knob
- control cable to shutter

A8

**Adjust the control cable**

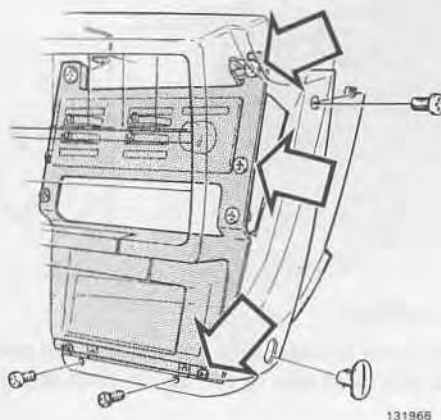
A9

**Install:**

- control mounting
- front panel for central console and control panel
- radio (if installed)
- side panels and soundproofing on both sides.

A10

**Reconnect the battery ground lead**



## Standard unit

### B. Fan motor switch, replacement

B1

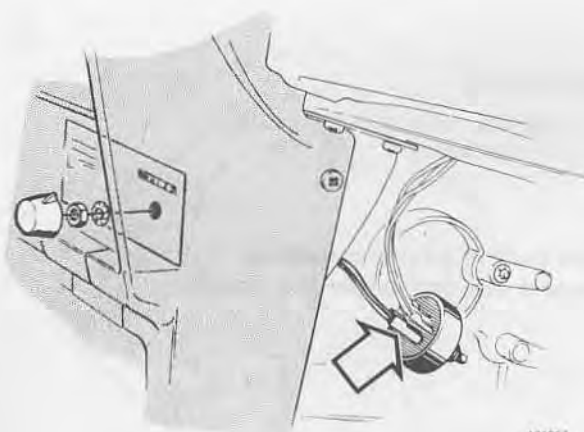
**Remove:**

- soundproofing and side panels on right hand side.
- control knob and nut. Mark up the cables and disconnect the switch.

B2

**Install:**

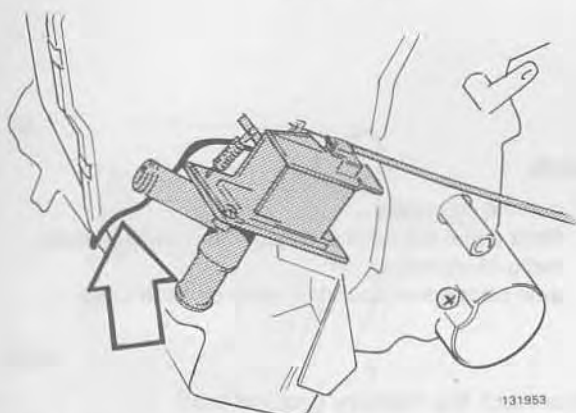
- cable and switch
- side panels and soundproofing



## Standard unit

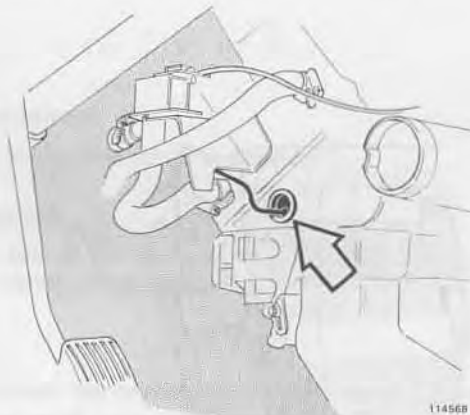
### C. Removal of heater

Note: Two different installations, type A and B are in use, see below.



**Type A**

The heater control valve capillary tube is inserted between both parts of the heater housing, and is connected to the heat exchanger by clips.



**Type B (modified)**

The control valve capillary tube can be removed through a hole in the left hand side of the heater housing.



**Disconnect the battery ground lead**

C1

**Move the heater controls to closed position**

C2

*Left hand side*

**Remove the side panel and soundproofing**

C3

**Disconnect:**

- defroster hose from the heater
- floor air vent.

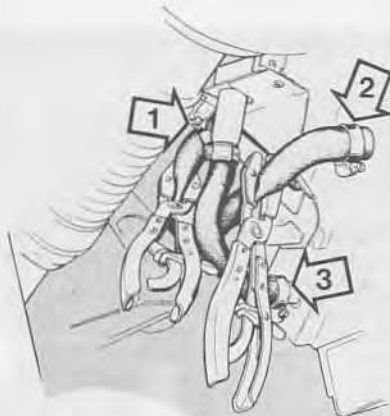
C4

**Fold back the floor carpeting.  
Place a drip pan under the heater**

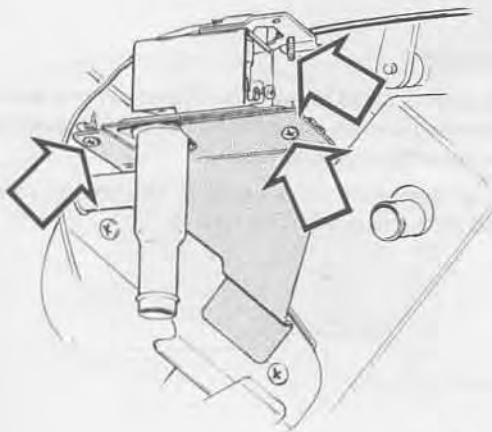
C5



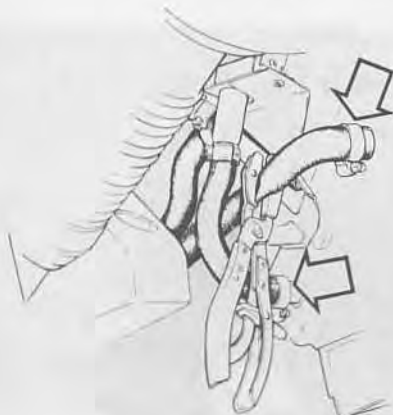




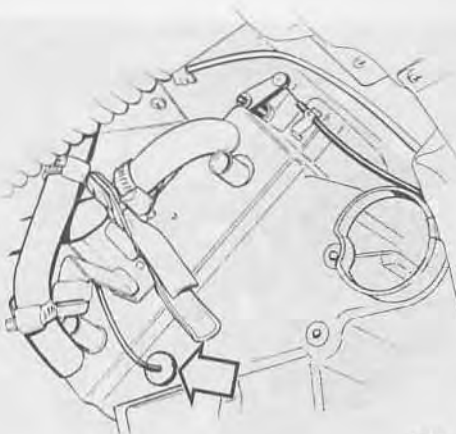
131955



131954



131951



131948

*Type A*

C6

**Attach two hose pliers:**

- one to the control valve inlet hose (1)
- the other to the heat exchanger input hose (2).

C7

**Disconnect the hoses 1 and 2 as indicated**

C8

**Disconnect and remove hose 3**

C9

**Remove the control valve from the bracket**

Disconnect the control cable from the control valve.

Continued at C13.

*Type B*

C10

**Attach a pair of hose pliers to the heat exchanger inlet hose**

C11

**Disconnect the hoses as indicated**

C12

**Remove the heater control valve capillary tube from the heater housing. Carefully pull outwards.**

Do not remove the control valve from the bracket.

Removal of heater

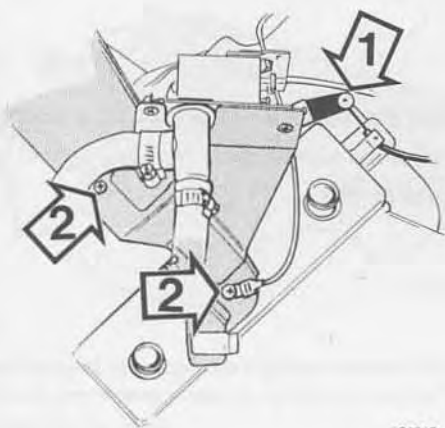


Starting from C13 the work procedures are the same for both types.

C13

**Remove:**

- both screws for the heater lower mounting
- attaching screw for the air duct to rear floor. Lower the duct slightly.

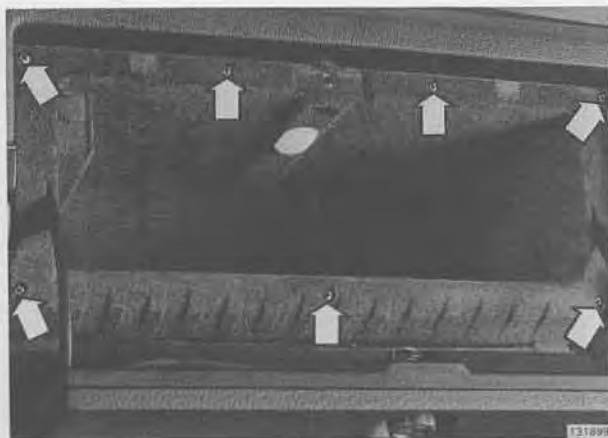


C14

**Disconnect:**

- the control cable for air-mix (1) and remove both the mounting screws in the heater housing (2) along with the fan motor ground lead.

**Note:** The illustration shows type B. The control valve is removed from the bracket on type A.



C15

**Remove the glove compartment**



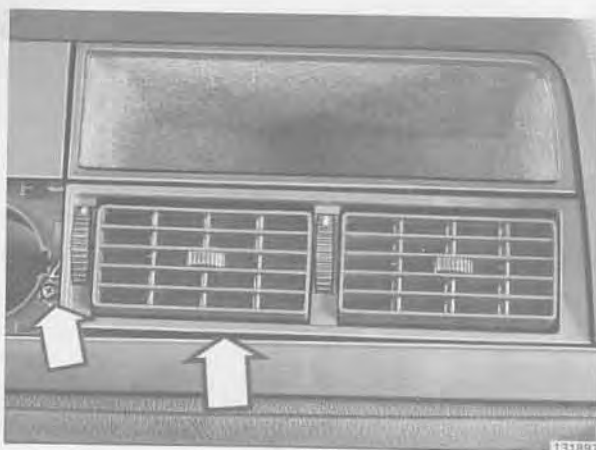
C16

**Remove the extra instrument cover plate**

**Note:** 1981-models only.



C17

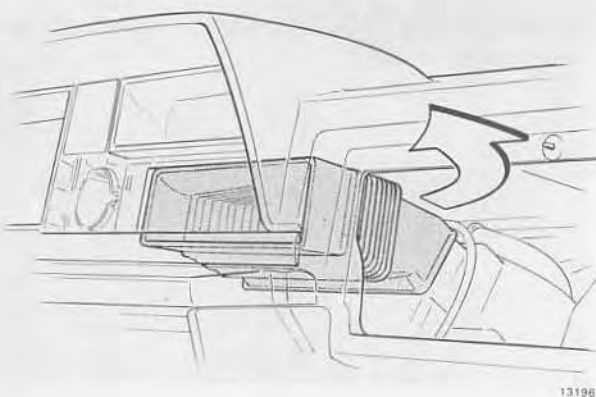


**Remove:**

- the frame around the centre air vents
- the air vents. They are secured by a screw.

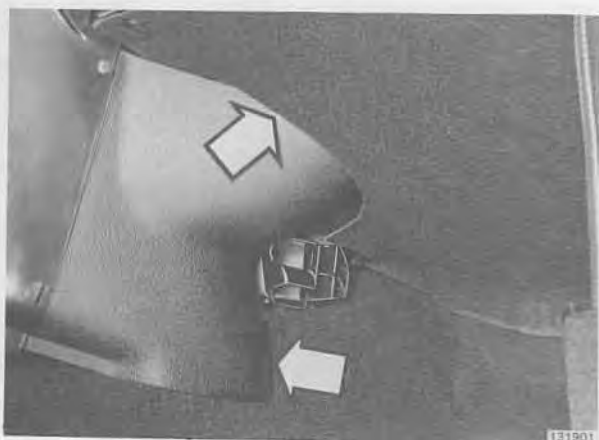
**Note:** A 1981 model is shown in the illustration. The air vents are secured by two screws in 1975-1980 models. The screws are located under the vents.

C18



**Remove the air duct connecting the heater to the air vents**

**Note:** A 1981 model is shown in the illustration.



*Right-hand side*

C19

**Remove the sound insulation and side panel**  
**Fold back the carpeting**

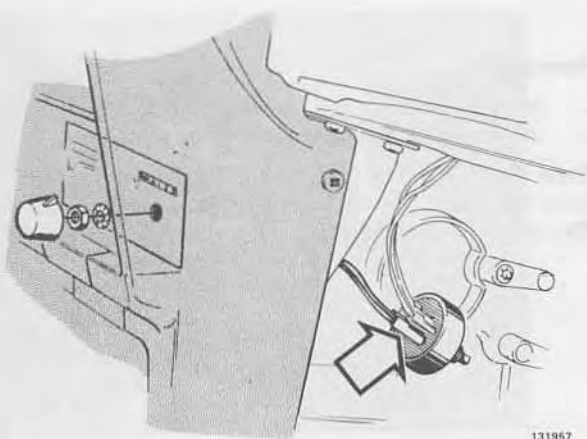


**Remove:**

- the defroster hose from the heater
- the attaching screws for the rear floor air duct. Lower it slightly
- the screw for the lower mounting on floor
- the heat exchanger drain hose.

C20

Removal of heater



C21

**Disconnect:**

- fan motor switch from panel
- positive lead from the switch



C22

**Disconnect the control cables for the floor and defroster shutters**



C23

**Remove both the screws in the firewall for the upper mounting. Then remove the heater and mounting as one unit.**

C24

**Remove the heater via right-hand side**

For type A: the control valve and capillary tube are attached to the heater.

For type B: the control valve is mounted on the bracket.

## Standard unit

### D. Installation of heater



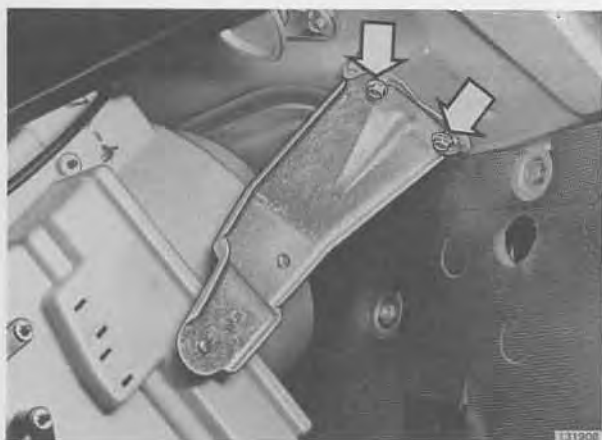
Check before installing the heater that the air inlet seal is intact and correctly installed

*D1*

Smear sealing cement around the screw holes in the right-hand mounting

**NOTE:** Make sure when installing the heater that the air intake seal is not displaced.

**Note:** A type A installation is shown where the control valve and heater are removed and installed as one unit.



*Right-hand side*

*D2*

Install the heater from the right-hand side

*D3*

Install both upper mounting screws to the fire-wall



*D4*

Connect the cables for the floor and defroster shutters. Adjust the shutters.

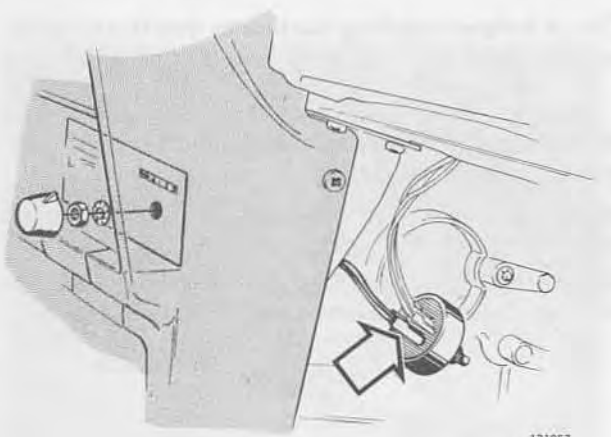
Installation of heater



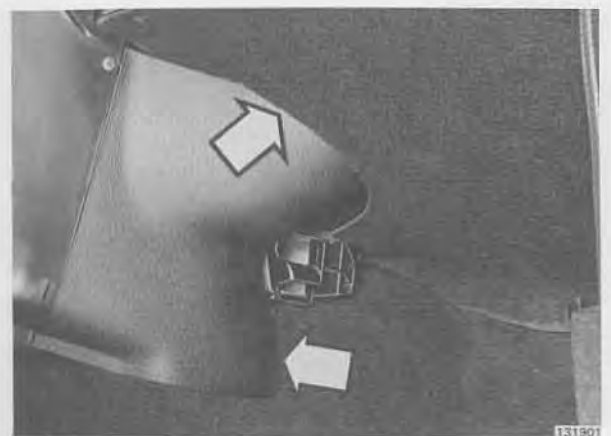
**D5**  
Align the heat exchanger drain hose in the footwell

**Install:**

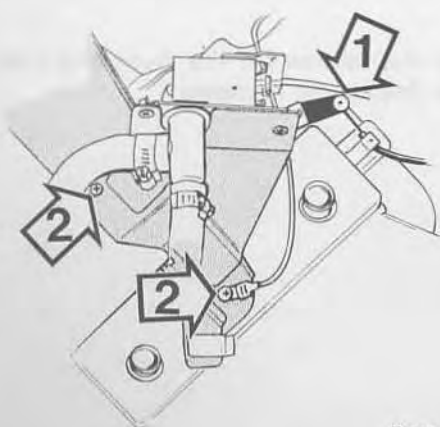
- heater lower mounting
- air duct for rear floor
- defroster hose.



**D6**  
**D7**  
Connect the heater positive lead to the switch. Attach the switch to the control panel



**D8**  
Fold back the floor carpeting. Reinstall the sound-proofing and side panel

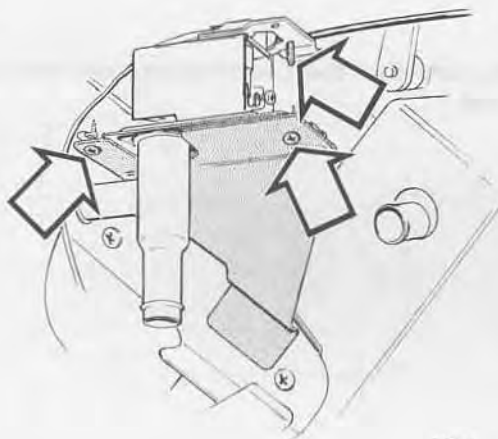


*Left-hand side*

**Install:**

- control cable for air-mix (1). Adjust the cable.
- both the upper mounting screws in the heater housing (2) along with the fan motor ground lead.

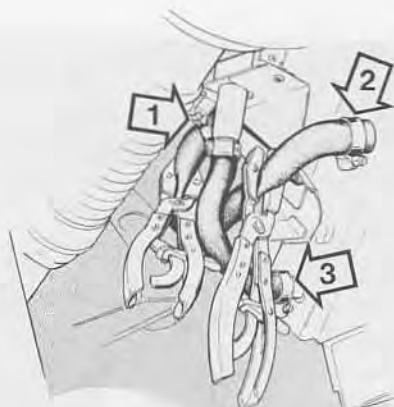
**Note:** A type B installation is shown where the control valve is not removed from the bracket.



*Type A*

**D10**

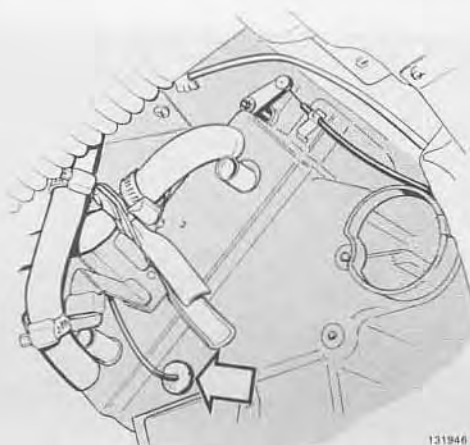
Connect the control cable to the heater control valve. Adjust the operation. Mount the valve on the bracket



**D11**

Connect hoses 1, 2 and 3. Remove the hose pliers

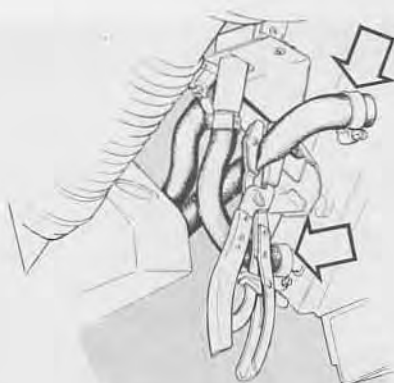
Continued at D15.



*Type B*

**D12**

Insert the control valve capillary tube through the hole in the heater housing. Secure the coil with a rubber plug

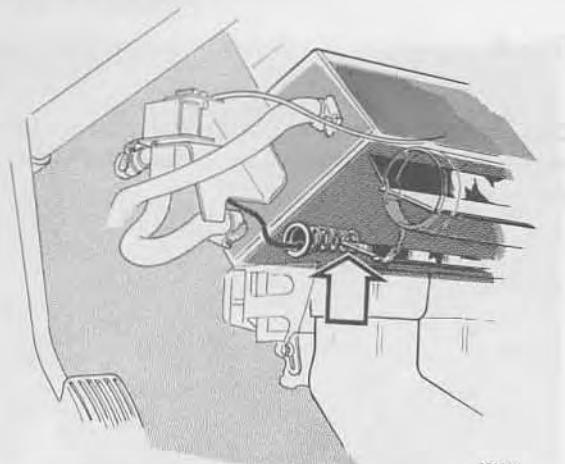


**D13**

Connect the hoses to the heat exchanger. Remove the hose pliers



Installation of heater



131949

D14

Make sure that the floor shutter does not touch the coil



131902

D15

Install:

- both screws for the heater mounting
- the attaching screw for the air duct to the rear floor.

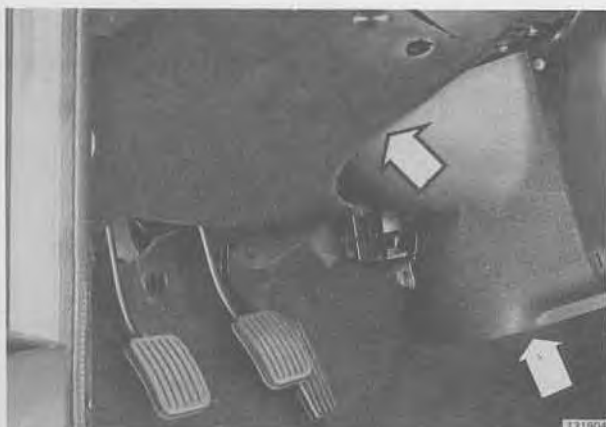


131899

D16

Install:

- the air vent for the front floor
- the defroster hose.



131904

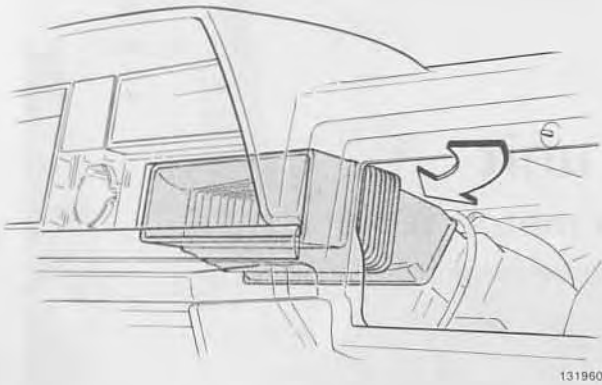
D17

Fold back the floor carpeting. Fit the soundproofing and side panel



D18

Install the air ducts between the heater and air vents

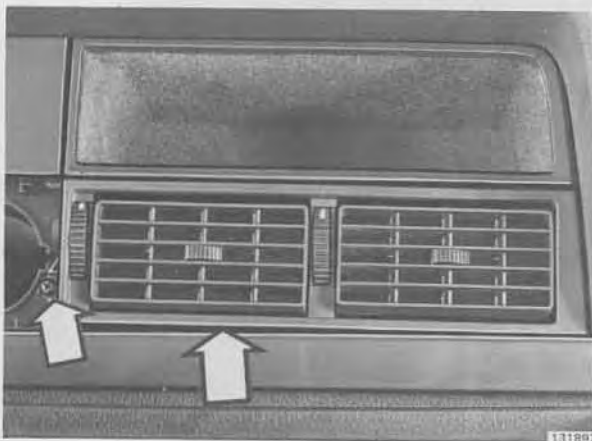


131860

D19

Install:

- the air vents
- the frame around the air vents.



131887

D20

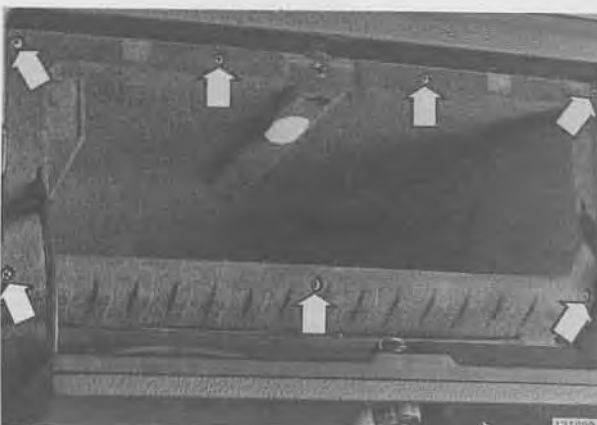
Install the extra instrument cover plate



131800

D21

Install the glove compartment



131809

D22

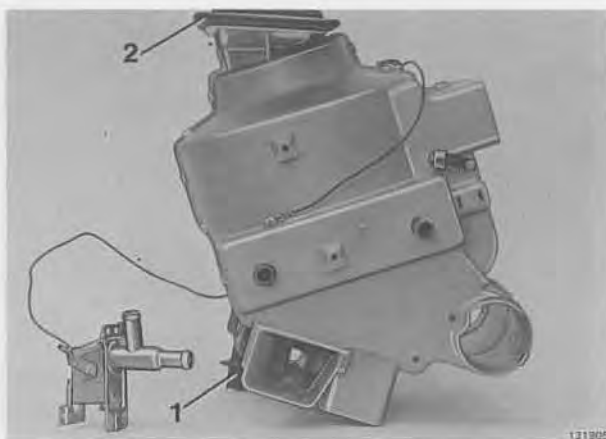
Reconnect the battery ground lead

D23

Check the coolant level and top-up if necessary

## Standard unit

### E. Heat exchanger and/or fan motor, replacement (Heater removed from vehicle)



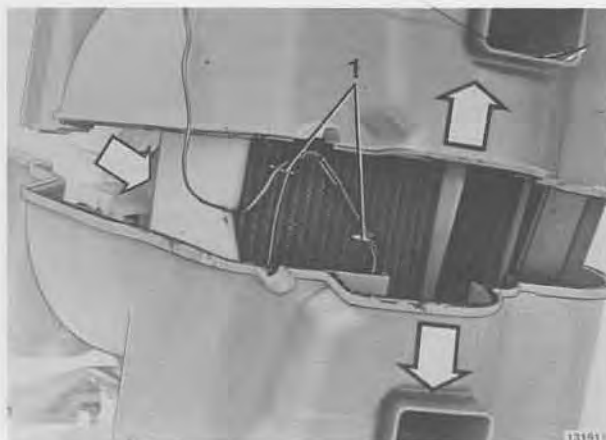
Disassembly of heater housing

E1

#### Disconnect:

- the heat exchanger drain hose (1)
- the air intake seal (2)
- all clips holding the heater housing halves together.

**Note:** The illustration shows a type A installation. On type B versions the control valve remains attached to the bracket.



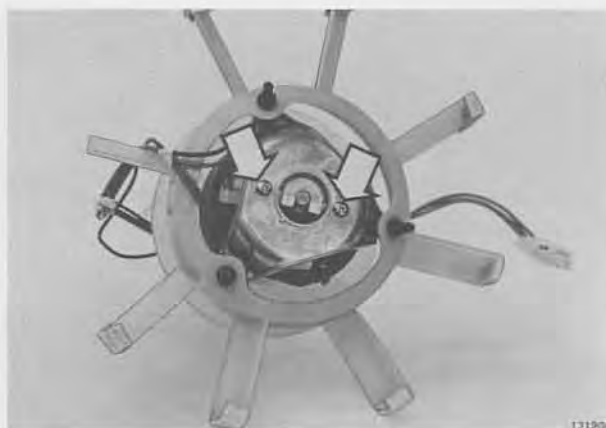
#### Separate the halves of the heater housing

Remove the clips securing the control valve capillary tube to the heat exchanger (1).

Lift up the heat exchanger. Transfer the seal if the heat exchanger is to be replaced.

**Note:** The illustration shows a type A installation. For type B versions the control valve capillary tube is already removed.

E2



#### If replacement of fan motor is necessary:

- remove the two screws which secure the fan motor and lift out the motor.

E3

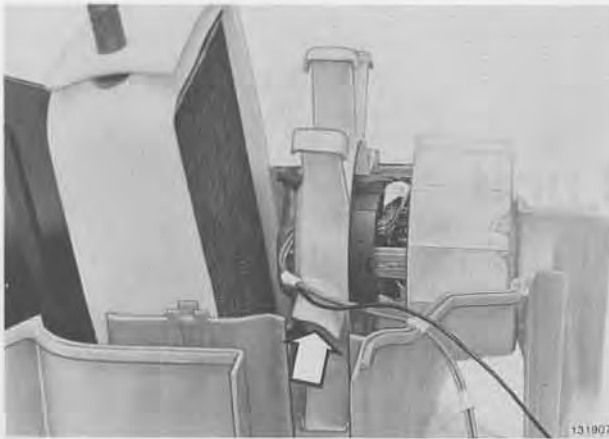
E4

#### Transfer the fan wheel to the new motor

E5

#### Attach the fan motor to bracket

Heat exchanger and/or fan motor, replacement



Assembly of heater housing

E6

**Install:**

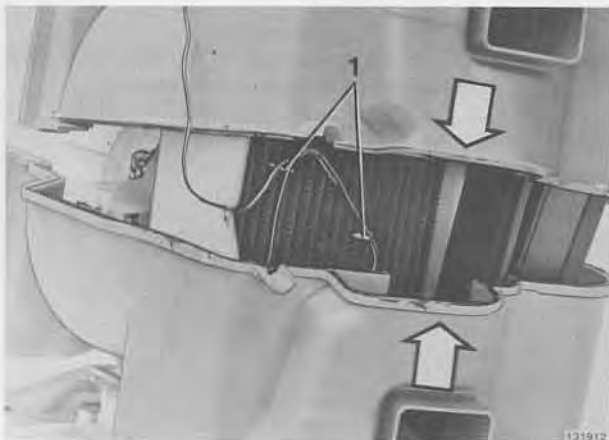
- the heat exchanger
- the fan motor.

**Note:** On assembly make sure that the fan motor holder is located correctly in the heater housing.



E7

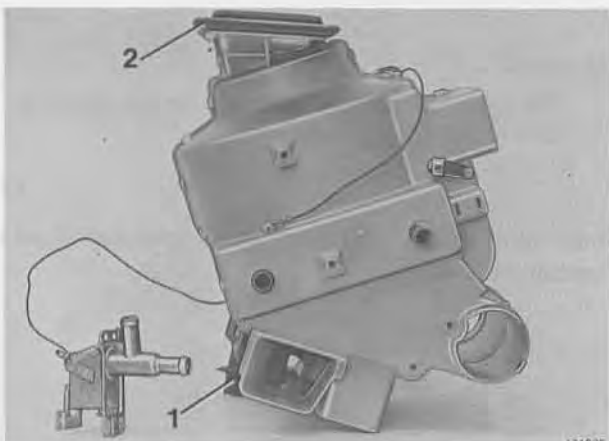
**Smear the bottom edge of the heater housing halves with Volvo sealant Part No. 686 275-9.**



E8

**Install:**

- the heater control valve capillary tube and clips (1) to the heat exchanger. Press together the heater housing halves.
- all clips for the heater housing halves



E9

**Connect:**

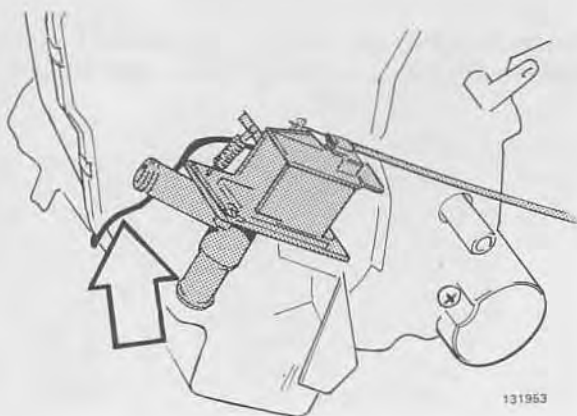
- the heat exchanger drain hose (1)
- the air intake seal (2)

**Note:** On assembly of the heater housing, modifications can be made so that it is possible to remove and install the control valve capillary tube directly through the left-hand side of the heater housing. See operations F9-F20 for further information.

## Standard unit

### F. Heater control valve, replacement

**Note:** Two different installations, type A and B are in use, see below.

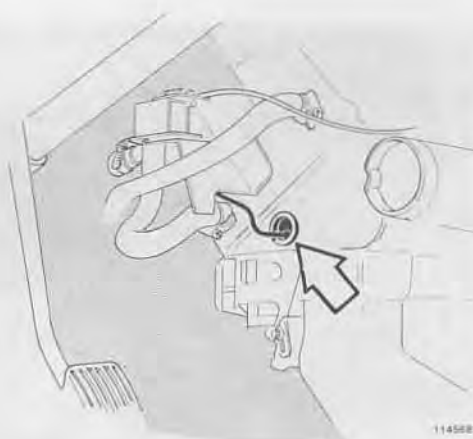


#### Type A

The heater control valve capillary tube is inserted between both parts of the heater housing and is connected to the heat exchanger by clips.

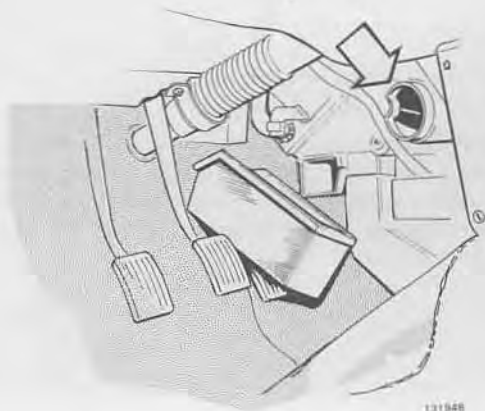
On replacement of the control valve, modifications should be made to convert the installation to type B.

For details see operation F9 onwards.



#### Type B (modified)

The control valve capillary tube can be removed through a hole in the left hand side of the heater housing.



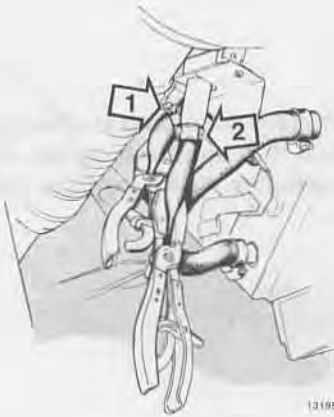
F1

#### Remove:

- the soundproofing and sidepanel on left-hand side
- disconnect the defroster hose

F2

Fold back the floor carpet and place a drip pan below the heater



Type A

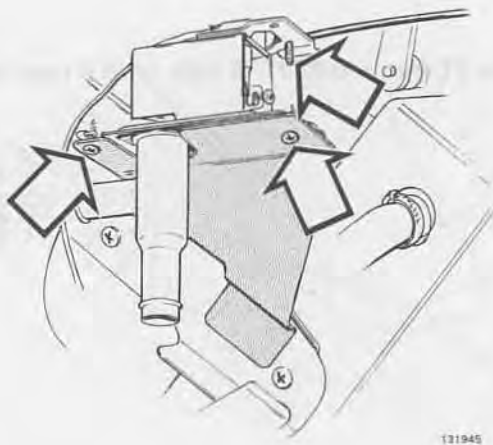
F3

**Attach two hose pliers**

- one pair to the control valve inlet hose (1)
- the other to the control valve outlet hose (2)

F4

**Disconnect the hoses indicated**



F5

**Remove the control valve from the bracket**

Cut off the capillary tube behind the heater and leave the rest on the heater.

Remove the control valve mounting screws and disconnect the control cables.

For modification continue from F9.



Type B (modified)

F6

**Attach two hose pliers:**

- one pair on the control valve inlet hose (1)
- the other on the control valve outlet hose (2)

F7

**Disconnect the hoses indicated**



F8

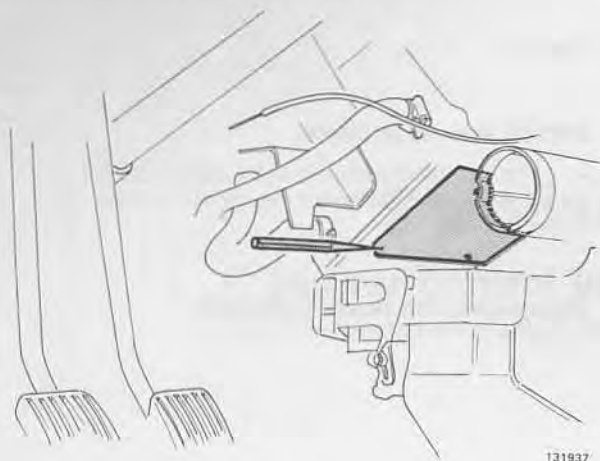
**Remove the control valve from the bracket**

Carefully pull out the capillary tube and rubber plug from the housing.

Remove the control valve and disconnect the control cable.

Continue from F12.



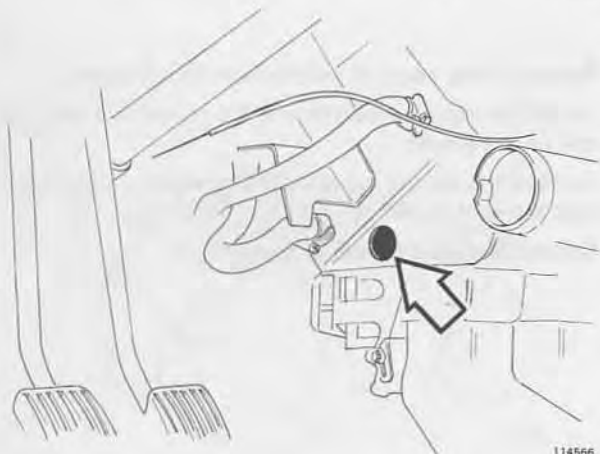


131937

# Modification

F9

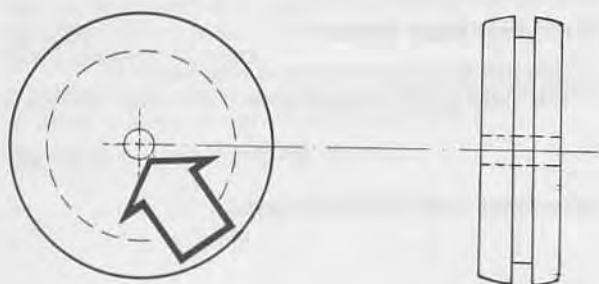
Cut out a template according to chart G. (back of manual). Place this template on top of holes for the shutter spindles. Mark out the hole for the rubber plug.



114566

F10

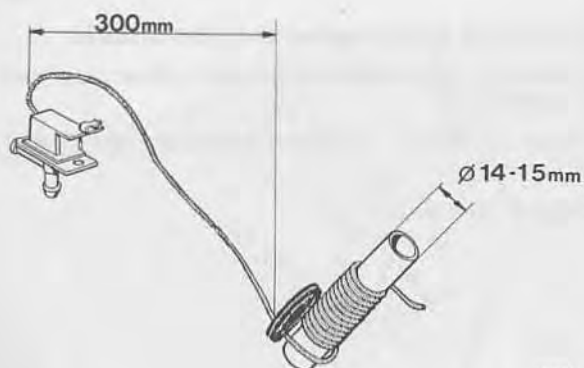
Cut a 21 mm = 0.827" Ø hole with a hole saw



114562

F11

Make a hole in the rubber plug (320404-7) with a small screwdriver (see fig).



114563

F12

Install the rubber plug onto the capillary tube of the new control valve about 300 mm = 11.8" from the valve

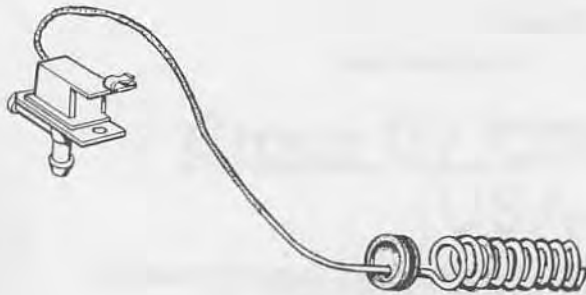
F13

Wind the tube around a screw or rod (Ø 14-15 mm = 0.5-0.6"). Make sure that there is space between the turnings



F14

Bend the tube as illustrated

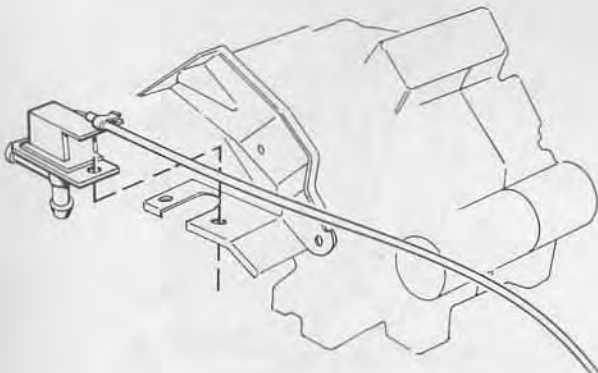


114564

*Installation*

F15

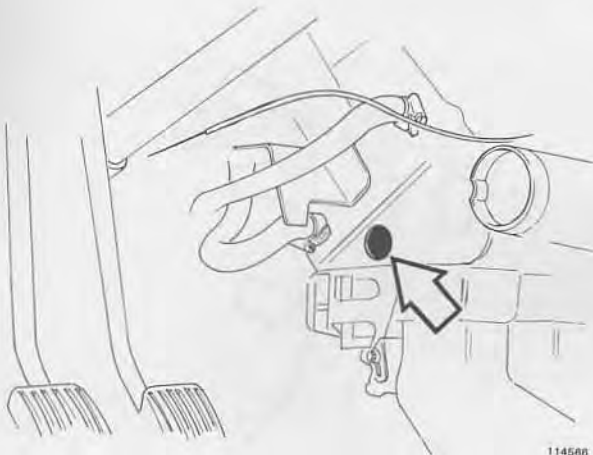
Connect the control cable and transfer the clip from the old to the new control valve. Adjust the cable.



114567

F16

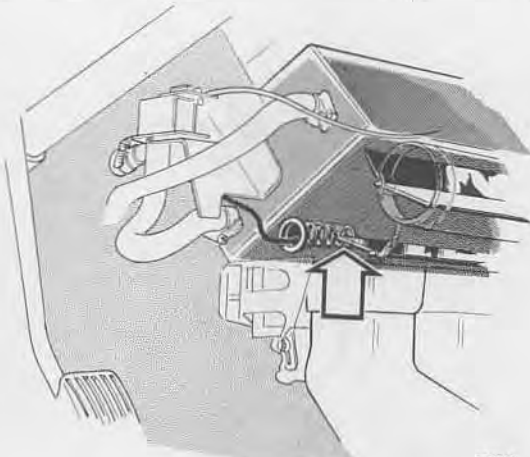
Insert the capillary tube through the drilled hole in the side of the heater. Secure it with the rubber plug



114568

F17

Connect the water hoses. Remove the hose pliers



131949

F18

Make sure that the floor shutter does not rub against the capillary tube



F19

**Connect:**

- the defroster hose

**Reinstall:**

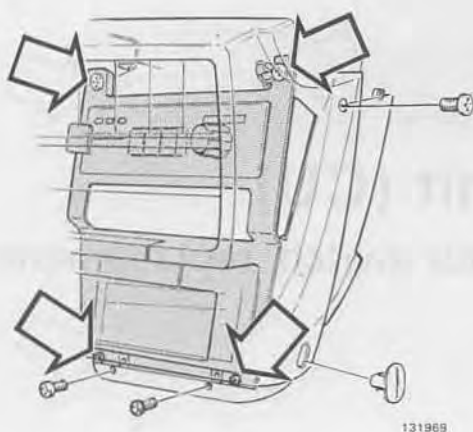
- the side panel and soundproofing.

F20

**Check coolant level. Top-up if necessary.**

## Group 87 Combined unit (CU) (USA-Canada)

### G. Heater control and/or cable, replacement



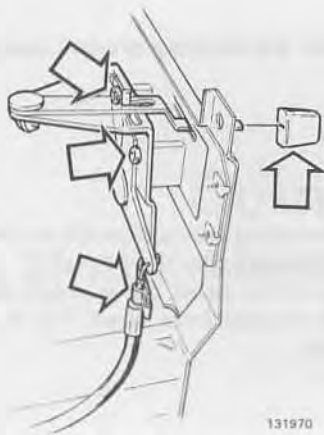
Disconnect the battery ground lead

G1

Remove:

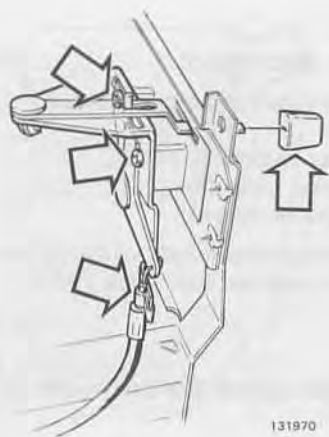
- soundproofing and side panels on both sides
- radio (if installed)
- centre control panel, move to one side
- central console, front side. Pull as far forward as possible.

G2



Remove the lever knob and disconnect the cable from the lever and control valve

G3

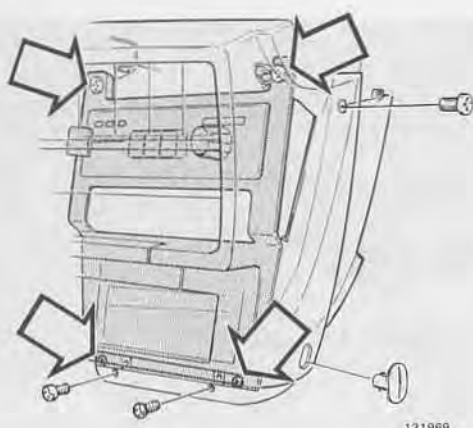


Connect the cable and reinstall the lever knob

G4

Adjust the operation

G5



131969

#### Reinstall:

- central console front panel
- centre control panel
- radio (if installed)
- side panels and soundproofing on both sides.

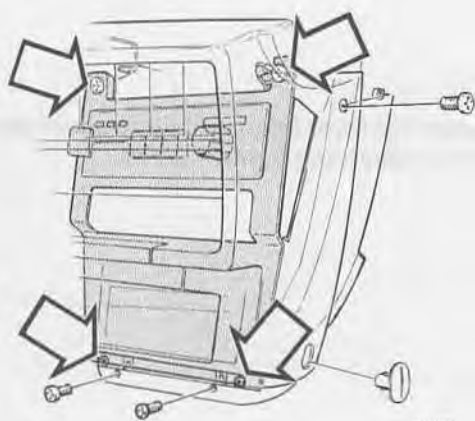
G6

G7

Reconnect the battery ground lead.

## Combined unit (CU)

### H. Control panel and/or fan motor switch, replacement



131969

Disconnect the battery ground lead

H1

H2

#### Remove:

- soundproofing and side panels on both sides
- radio (if installed)
- centre control panel, move to one side
- central console front panel. Pull as far forward as possible.

H3

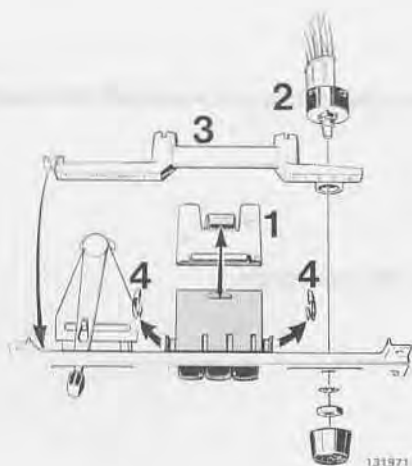
#### Remove or disconnect:

- protective plate above the control panel vacuum hose (1)
- fan motor switch (2)
- illumination panel (3)
- control panel clips (4).

**Note:** The protective panel above the vacuum hoses is not removable on vehicles built since 1981.

H4

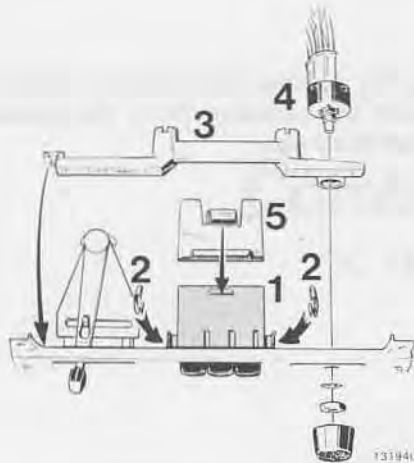
Mark up and disconnect the hoses on the control panel



131971

Shutter actuator for rear floor vent, replacement

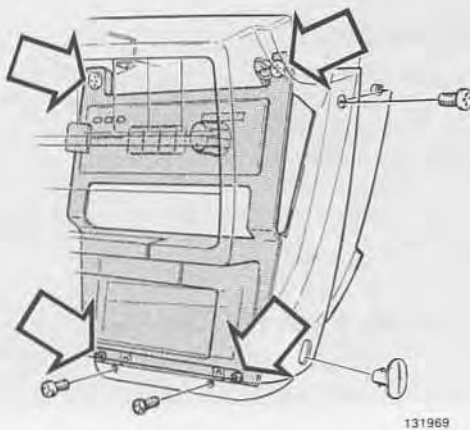
H5



**Connect:**

- the vacuum hoses to the control panel
- panel (1) and clips (2)
- illumination panel (3)
- fan motor switch (4)
- protective panel above the vacuum hoses (5).

H6



**Install:**

- central console front panel
- centre control panel
- radio (if installed)
- side panels and soundproofing on both sides.

H7

**Reconnect battery ground cable.**

## Combined unit (CU)

### I. Shutter actuator for rear floor vent, replacement

I1

**Disconnect the battery ground lead**

I2

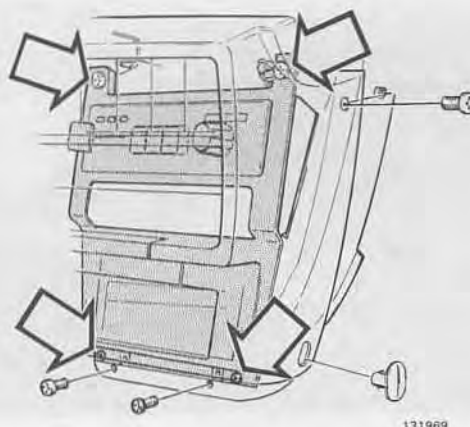
**Remove:**

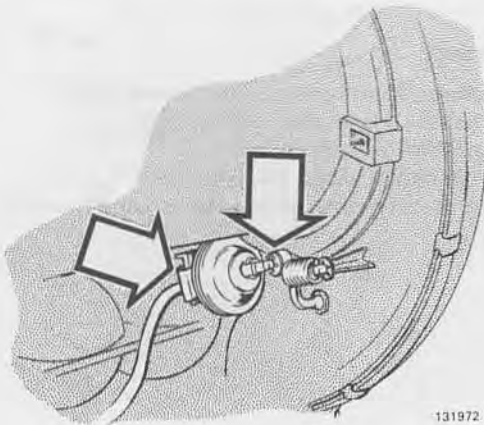
- soundproofing and side panels on both sides
- radio (if installed)

I3

**Free the centre control panel and front panel of central console**

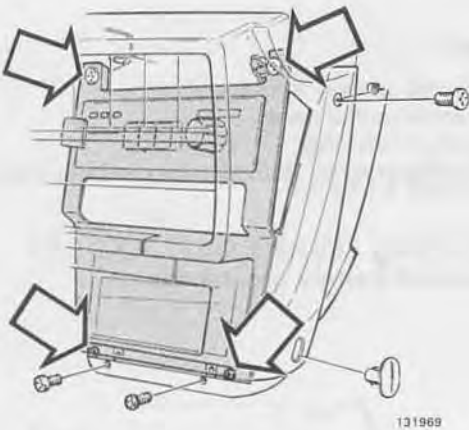
Pull it as far forward as possible to free it from the radio compartment. It may be necessary to detach the radio compartment.





14

Remove the locking clip for the control valve. Disconnect the actuator from the bracket and disconnect the hose



15

**Install or connect:**

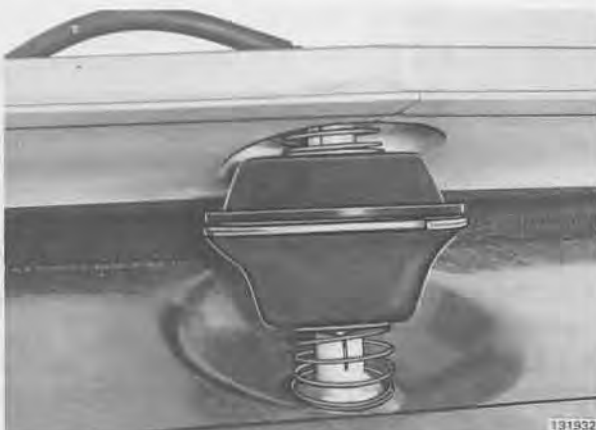
- the shutter actuator. Use new locking clips for the control lever
- the central console front panel
- centre control panel
- radio (if installed)
- side panels and soundproofing on both sides.

16

Reconnect the battery ground lead

## Combined unit (CU)

### J. REC-shutter actuator, replacement



The heater must be removed from the vehicle before the shutter actuator can be removed.



## Combined unit (CU)

### K. Removal of heater



Disconnect the battery ground lead

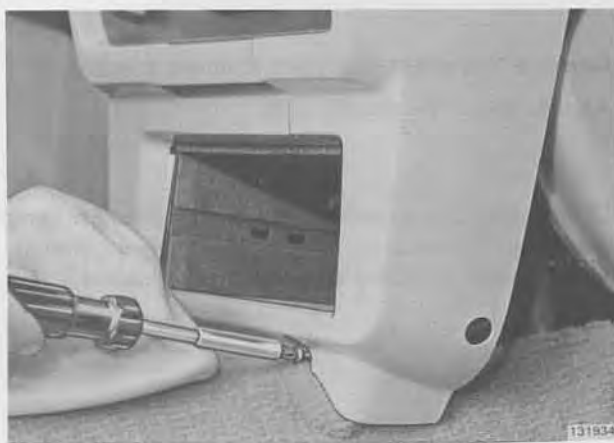
K1

Move heater controls to closed position

K2

Remove soundproofing and side panels on both sides

K3



Remove:

- radio (if installed)
- centre control panel. Disconnect any cables and move the panel to one side.

**Note:** If the vehicle has an air conditioning system, take care to avoid damage to the heater capillary tube (heat sensor).

K4

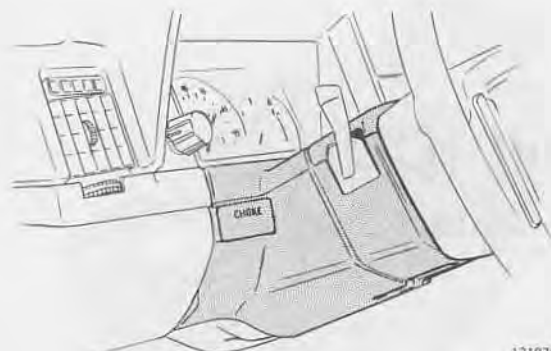


Remove:

- the glove compartment
- the strip below the right-hand air vent. Carefully pry off with a screwdriver.

K5

Removal of heater

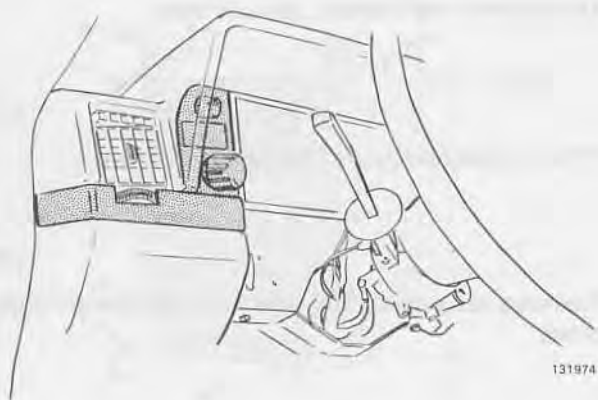


131976

K6

**Remove the steering wheel casings and disconnect the choke control (coverplate).**

**Note:** For vehicles with the CI (fuel injection) system, remove the coverplate for the choke.

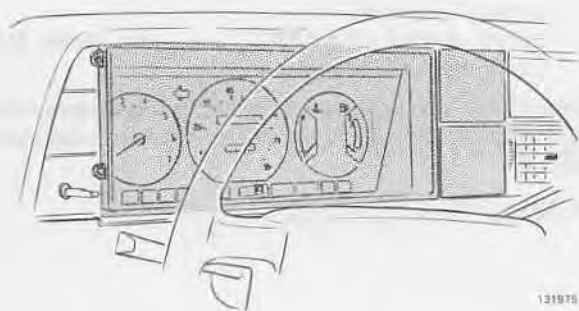


131974

K7

**Remove:**

- the strip below the left-hand air vent
- the knob for adjusting the instrument lighting intensity
- the light switch knob. Do not remove the switch.



131975

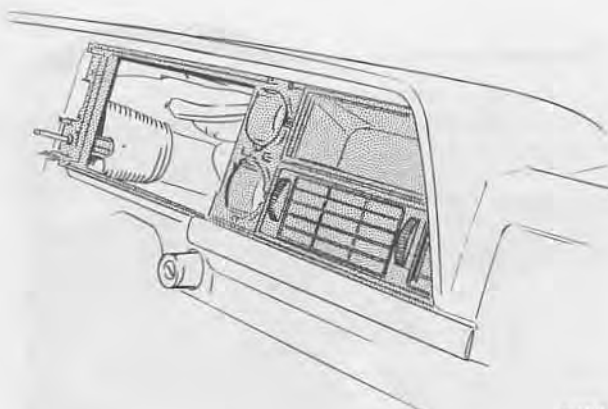
K8

**Remove the extra instrument cover plate**

*Applies to 1981- models only.*

K9

**Disconnect the speedometer drive cable and any electrical connections from the combined instrument panel. Remove the instrument panel.**



131973

K10

**Remove:**

- the storage compartment
- the centre air vents
- the instrument panel frame.

*Left-hand side*

K11

**Unplug the windscreen/windshield wiper connectors**

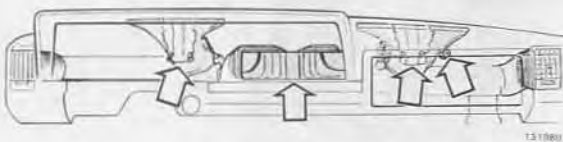


131977

K12

**Disconnect:**

- the air duct between the heater and centre air vents
- the lead to the glove compartment light
- the rubber straps for the defroster vents.

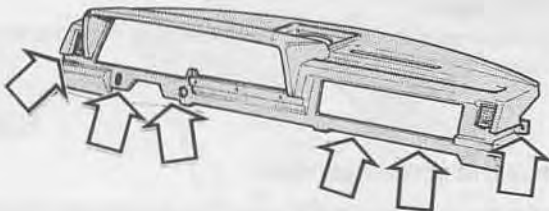


131980

K13

**Remove the dashboard**

*Applies to 1981- models only.*

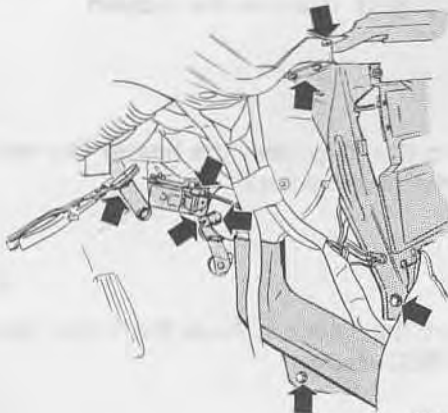


131978

K14

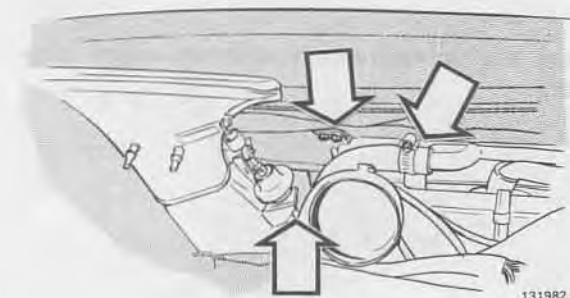
**Remove or disconnect:**

- attachment screws for rear floor air duct. Lower the duct slightly
- lower heater mounting
- hose to vacuum tank
- cable to control valve
- upper and lower screws for central console
- screws on the centre support
- fan motor ground lead
- inlet hose to control valve. Use hose pliers to clamp the hose.



131979

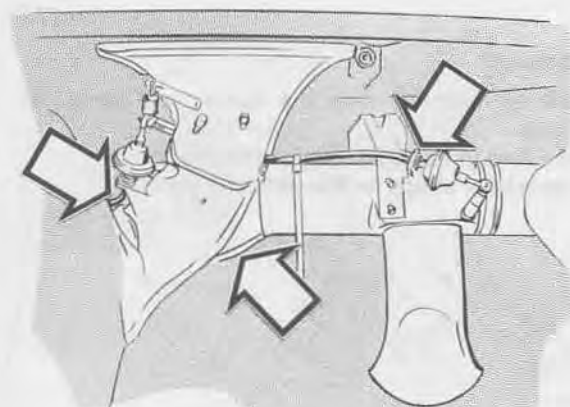
Removal of heater



131982

**Disconnect the upper hose from the heat exchanger**

K15



131867

*Right-hand side*

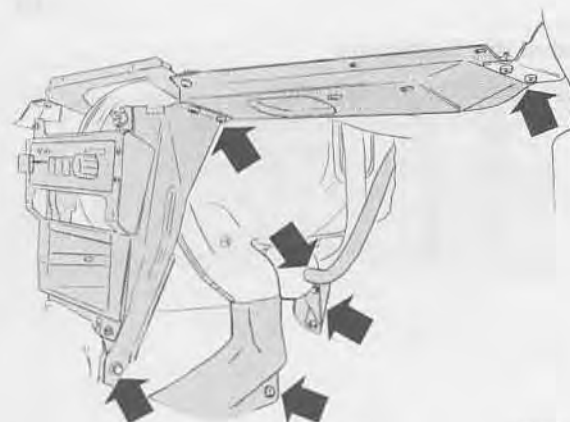
**Disconnect:**

- hoses to the shutter actuators
- air ducts.

K16

K17

**Slacken the heater upper mounting screws**



131983

**Remove or disconnect**

- the hose from the vacuum tank
- the screws securing the rear floor duct. Lower the duct slightly
- both screws for heater lower mounting. Remove the mounting.

K18

K19

**Detach the central console**

Remove the upper and lower mounting screws and move the console to one side.

K20

K21

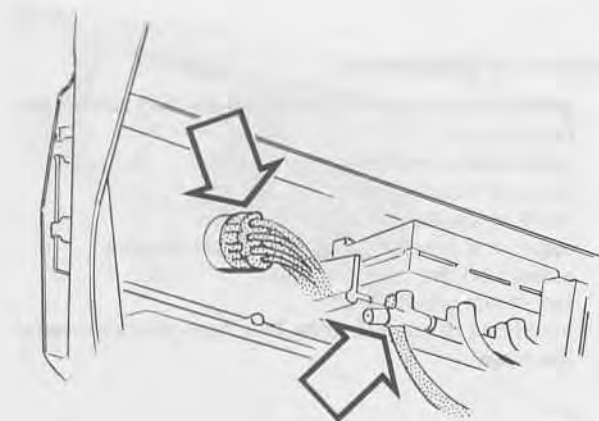
**Remove the mounting screws for the right-hand support (upright). Remove the support**

K22

**Disconnect the plug from the heater fan switch and also the positive lead**

K23

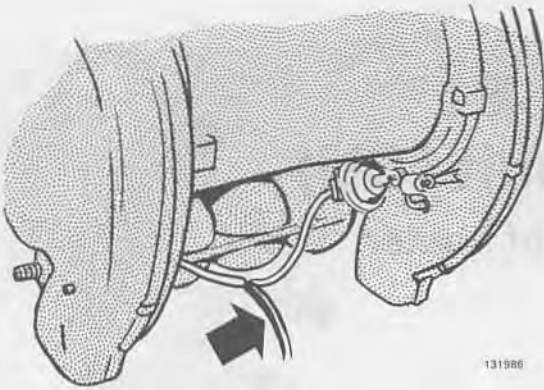
**Disconnect the vacuum hose from the control panel for REC-shutter**



131981

K24

Disconnect the input vacuum hose from the T-connection to the floor shutter actuators.



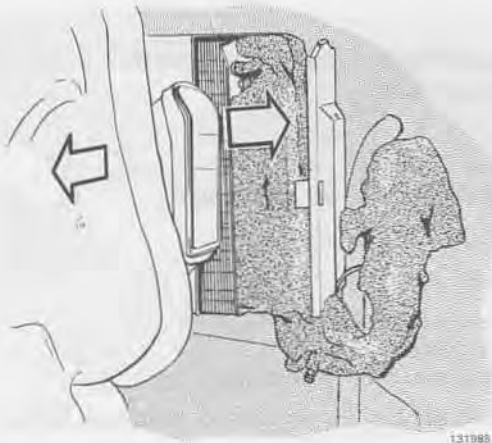
131986

For vehicles with AC continue as follows:

K25

Remove the evaporator cover clips  
Move the cover to one side and free the evaporator slightly

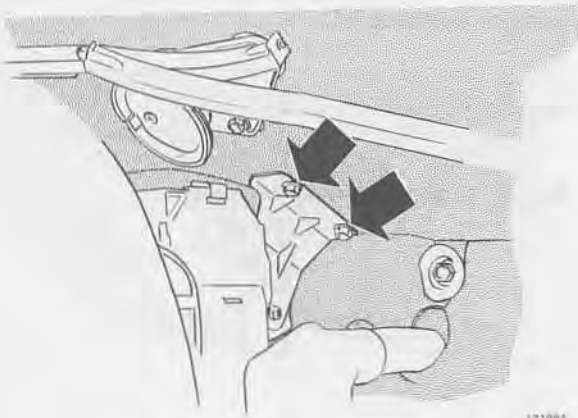
**Note:** Take care not to damage the heat sensor (capillary tube) when freeing the evaporator. It may be necessary to disconnect it from the evaporator.



131988

K26

Remove the upper mounting screws and lift out heater + evaporator as one unit

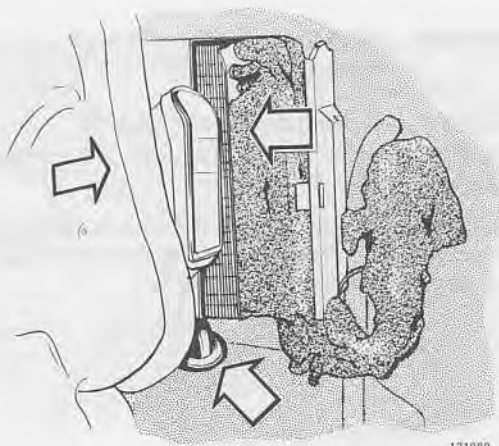


131984



## Combined unit (CU)

### L. Installation of heater



L1

**Check before installing the unit that the air intake seal is intact**

*For vehicles with air conditioning:*

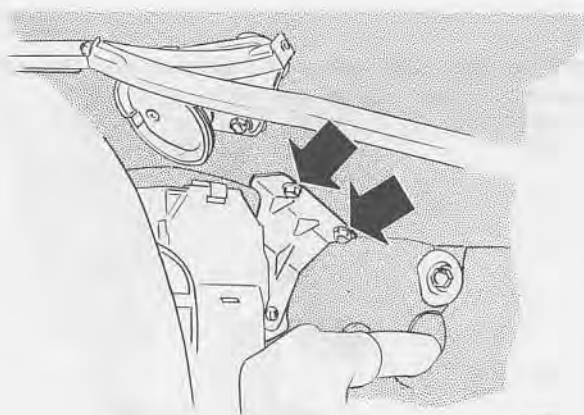
L2

**Install:**

- evaporator + heater
- evaporator cover
- capillary tube (if removed)

Insulate all hose connections to avoid heat losses.

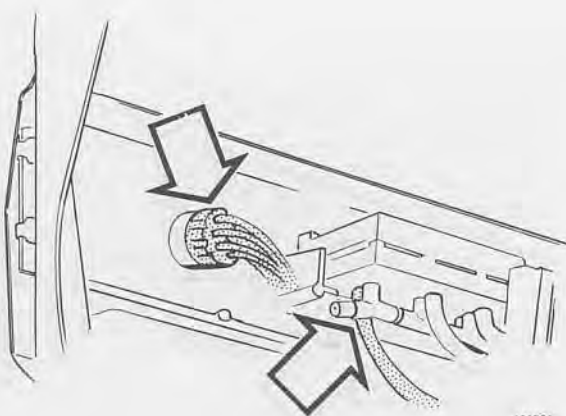
**From L3 all work procedures apply to vehicles with or without AC**



*Right-hand side*

L3

**Install upper retaining screws**



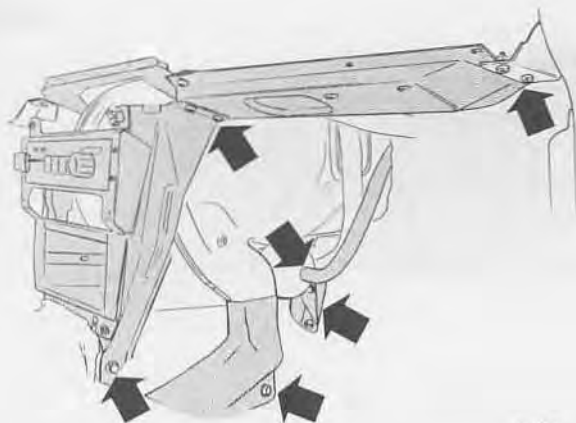
L4

**Connect:**

- vacuum hose to control panel for REC shutter and fit the cover above the hoses
- the plugs for the fan motor switch
- the fan motor positive lead.



L5

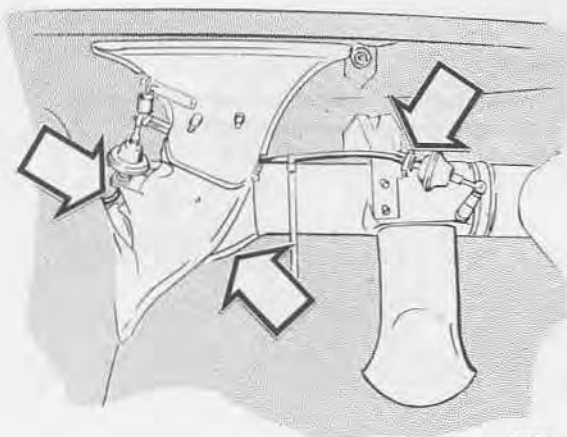


131983

**Install:**

- hose to vacuum tank
- heater lower mounting
- air duct to rear floor
- upper support (upright)
- central console.

L6



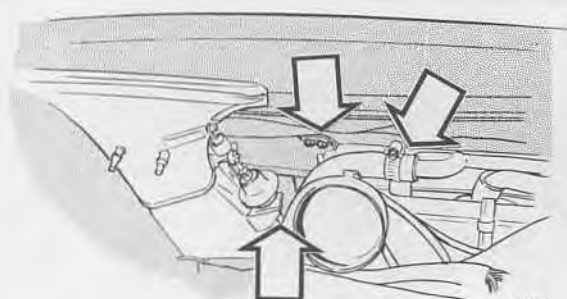
131867

**Connect:**

- air ducts
- hoses to shutter actuators.

*Left-hand side*

L7



131982

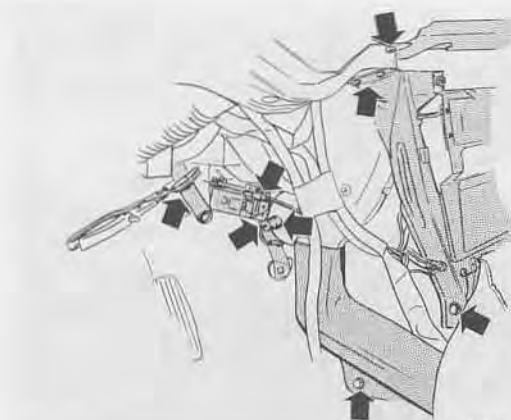
**Tighten the heater upper mounting screws**

L8

**Connect:**

- upper water hose to the heat exchanger
- air ducts
- hoses to the shutter actuators.

L9



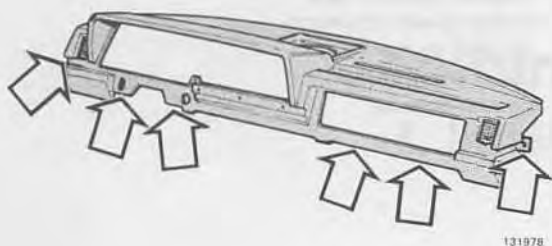
131979

**Install or connect:**

- lower heater mounting
- hose to the control valve. Remove the pliers
- cable to the control valve. Adjust the cable
- hose to the vacuum tank
- air duct to the rear seat
- upper and lower screws to the central console
- screws to the centre support (upright)
- fan motor ground lead.

L10

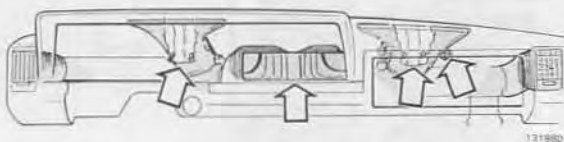
**Install the dashboard**



L11

**Connect:**

- air duct between heater and centre air vents
- elec. lead to glove compartment light
- defroster vent grommets.



L12

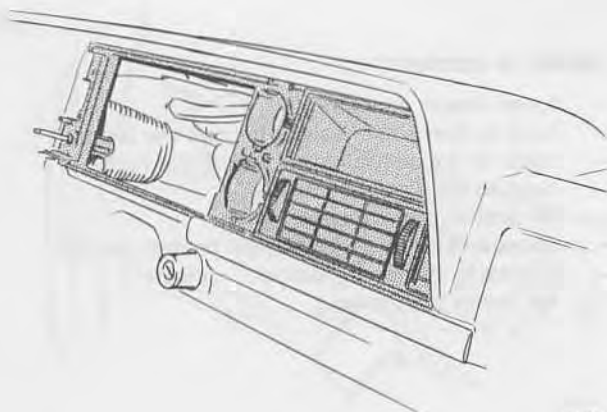
**Reconnect windscreen/windshield wiper plugs**



L13

**Install:**

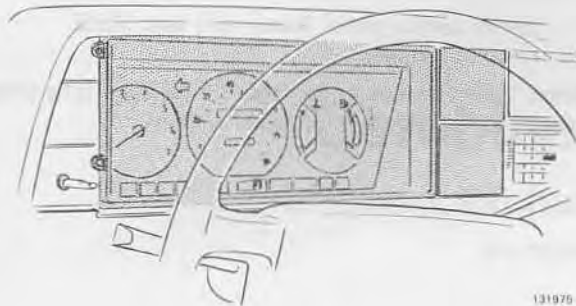
- instrument panel frame
- centre air vents
- storage compartment.



L14

**Install:**

- combined instrument panel and reconnect the speedometer drive cable and elec. leads
- cover panel for extra instruments.

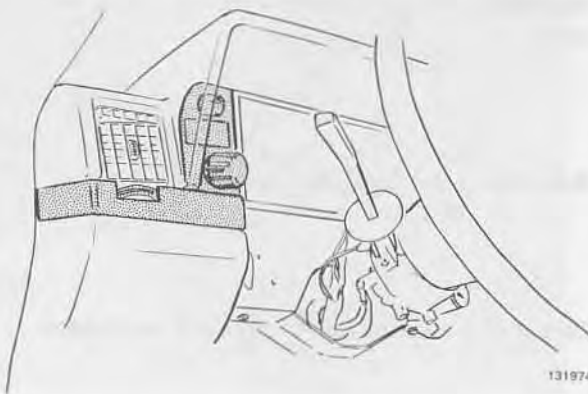


131975

L15

**Install:**

- light switch knob
- control knob for instrument lighting intensity
- strip below outer left-hand air vent.



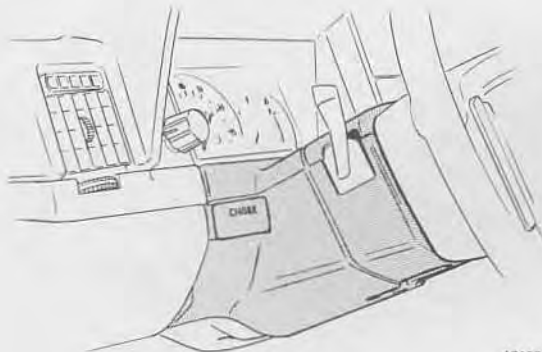
131974

L16

**Install:**

- steering column casings
- choke control if installed

**Note:** For CI (fuel injection) engines refit the cover plate for choke.



131976

L17

**Install:**

- strip below the outer right-hand vent
- glove compartment.



131933



**Install:**

- centre control panel. Reconnect elec. leads.
- radio (if installed).

**Note:** Take care not to damage the capillary tube (heat sensor) if the vehicle is equipped with AC.

L18



**Reinstall side panels and soundproofing on both sides**

L19

**Reconnect the battery ground lead**

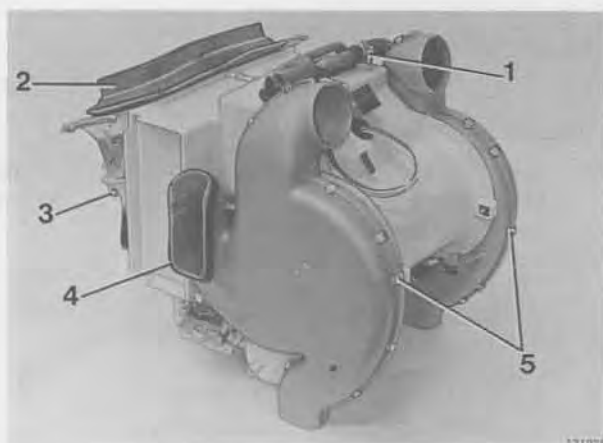
L20

**Check the coolant level, top up if necessary.**

L21

## Combined unit (CU)

### M. Heat exchanger, replacement (removed heater)



#### Disassembly of heater housing

M1

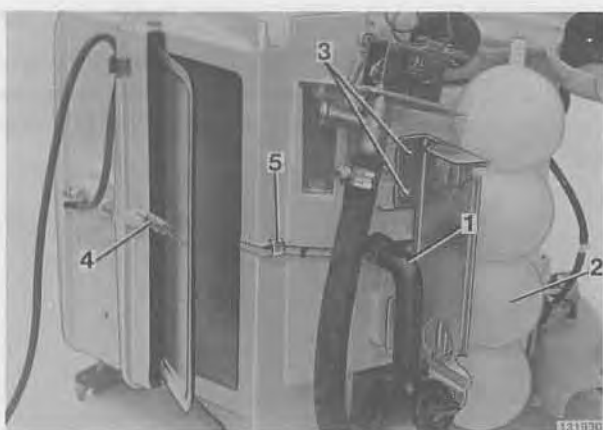
#### Remove or disconnect:

- upper hose to the heat exchanger (1)
- the air inlet rubber seal (2)
- the REC-shutter clips, left-hand-side (3)
- the rubber seals for both defroster vents (4)
- all clips for both the outer fan casings (5). Remove the casings.



M2

Remove the fan wheel locking clips on both sides



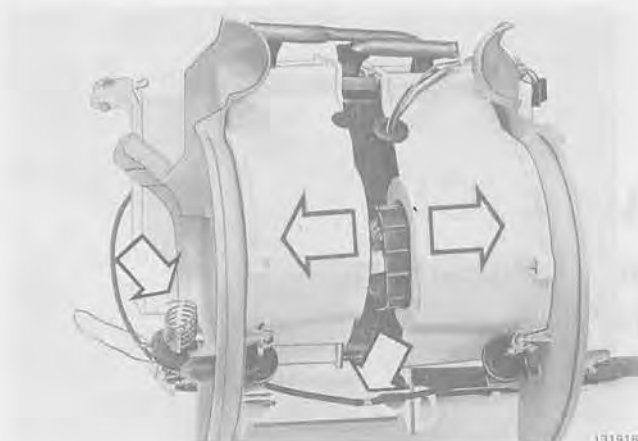
M3

#### Remove:

- the heater core drain hose (1)
- vacuum tank (2)
- retaining screws for vacuum tank bracket on left-hand-side (3)
- REC-shutter spring (4)
- all heater housing clips (5).



Heat exchanger, replacement



**Remove or disconnect:**

- retaining screws for fan motor
- heater control valve capillary tube from attachment
- the shutter actuators rubber hose from the T-joint.

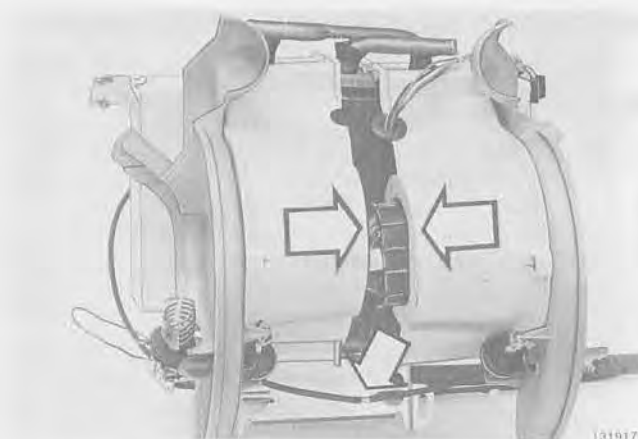
M4

**Pull apart the heater housing**

M5

**Remove the heater core and fan motor**

M6



**Assembly of heater housing**

M7

**Install:**

- heat exchanger and fan motor to heater housing. Make sure that the plastic cover for the fan motor is positioned correctly
- the shutter actuator hose to the T-joint.



Smear the lower edge of the heater housing halves with sealant. Volvo part no. 686 275-9 or equivalent.

M8



Insert the REC-shutter shaft in the heater housing at the same time as both heater housing halves are assembled and the shutter actuator is installed.

M9

**Install or connect:**

- REC-shutter clip
- return spring
- all heater housing clips
- vacuum hose to REC-shutter actuator.

M10



**Tighten the fan motor screws**

M11



**Attach the heater control valve capillary tube to the mounting**

M12

M13

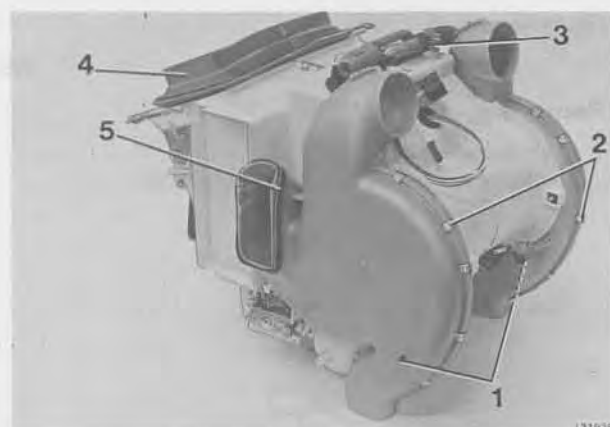
**Install:**

- retaining screws for the vacuum tank bracket and vacuum tank
- heater core drain hose.



**Attach both fan wheels and secure with clips**

M14



**Install the outer fan casings**

Check that the shafts (1) are located correctly.

M15

M16

**Now install the following parts:**

- all fan casing clips (2)
- upper water hose to heater core (3)
- air intake rubber seal (4)
- rubber seals for defroster hoses inlet, both sides (5).

## Combined Unit (CU)

### N. Fan motor, replacement

Vehicles built during 1975–1980 have a field wound fan motor. 1981–vehicles have a 4-speed permanent magnet motor. In the future only this type of motor will be stocked as a spare part. When installing a new type motor on 1975–1980 vehicles modifications and additional parts are required to obtain correct fit.



**Disconnect battery ground lead.**

N1

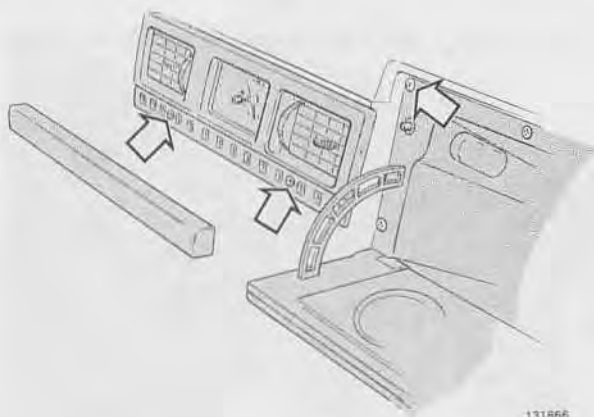
#### Remove:

- sound insulation and side panels on both sides
- radio (if installed).

N2

**Detach the control panel and central console**

N3

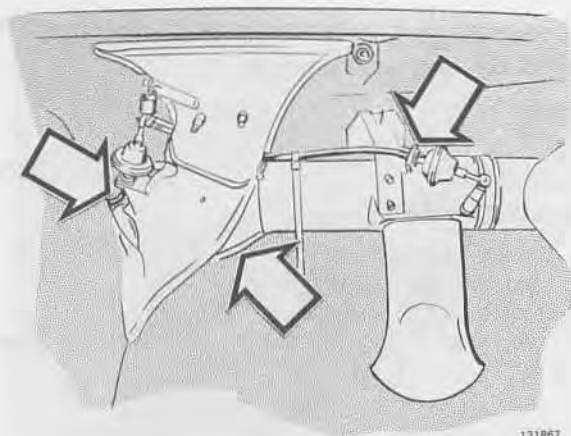


#### Remove or disconnect:

- centre air vents
- cable connectors from the clock
- glove compartment
- air ducts for the centre air vents.

N4

**Note:** A 1975–1980 version is shown. On the 1981 version, the air vents are secured by a screw.

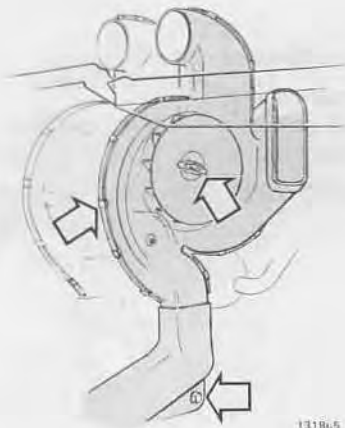


**Right-hand-side**

#### Remove:

- air ducts
- disconnect hoses to shutter actuators.

N5



131865

**Fold back the floor carpet**

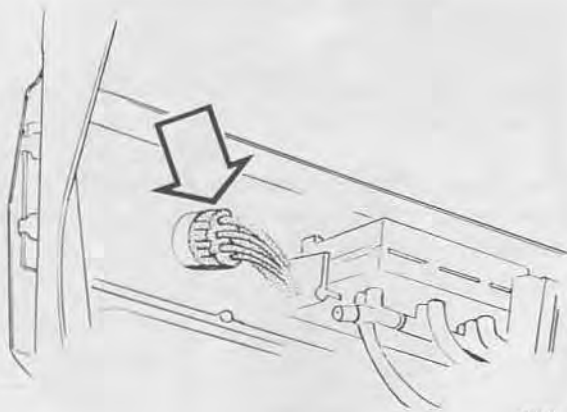
N6

**Remove:**

- screw for the rear floor air duct. Move the duct to one side slightly
- outer fan casing
- fan wheel.

**Note:** It may be necessary to remove the support under the glove compartment to remove the fan casing.

N7

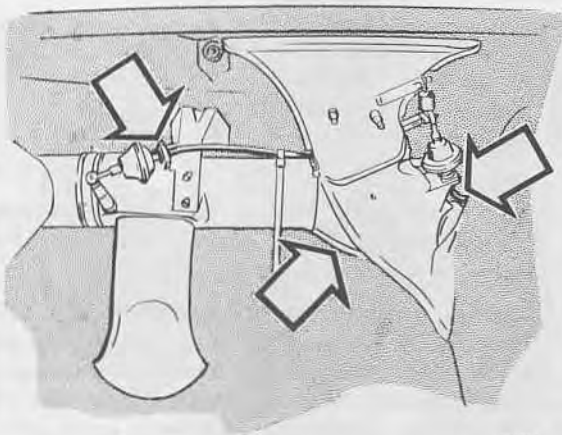


131863

**Disconnect:**

- fan motor switch from central console
- elec. leads from the switch.

N8



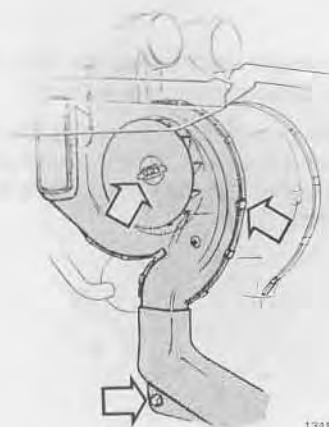
131868

*Left-hand side*

**Disconnect:**

- air ducts
- hoses to shutter actuators.

N9



131864

**Fold back the floor carpet**

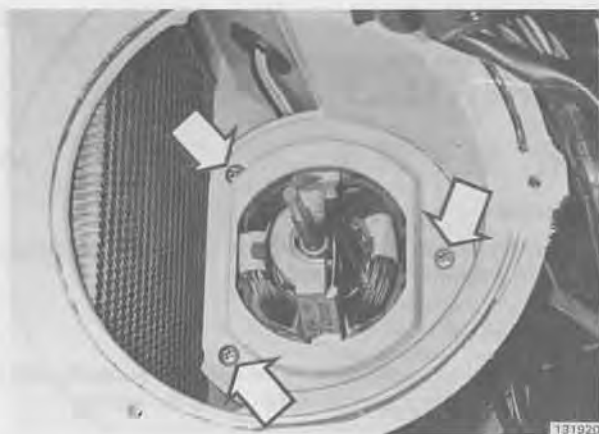
N10

**Remove:**

- screw for rear floor air duct. Move the duct to one side slightly
- outer fan casing
- fan wheel

N11

Fan motor, replacement



**Remove or disconnect:**

- inner fan casing
- hose to shutter actuator for rear floor
- fan motor and ground lead.

**Note:** A 1975–1980 version is shown.

N12



*Modification of 1975–1980 models*

N13

*(Vehicles built since 1981 or previously modified vehicles, continue from N15.)*

**File edges of heater housing approximately 1/8 inch, to obtain correct fit for new permanent magnet motor**

The following additional parts are necessary:

Part	Number	Quantity
Motor	1307845-6	1
Resistor	1307846-4	1
Switch	1259912-2	1
Screw	955145-8	3
Washer	192404-2	2
Plastic Bush	1307391-1	3

N14

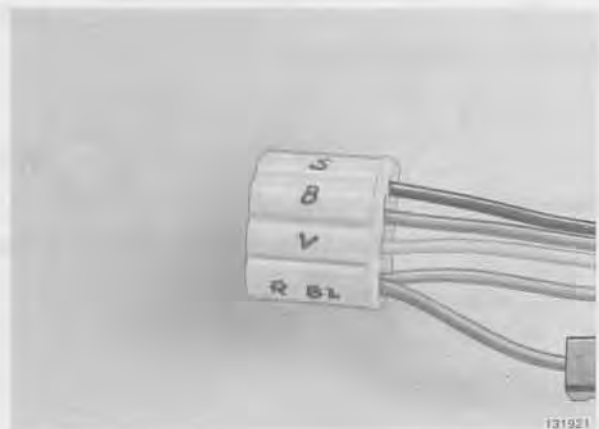
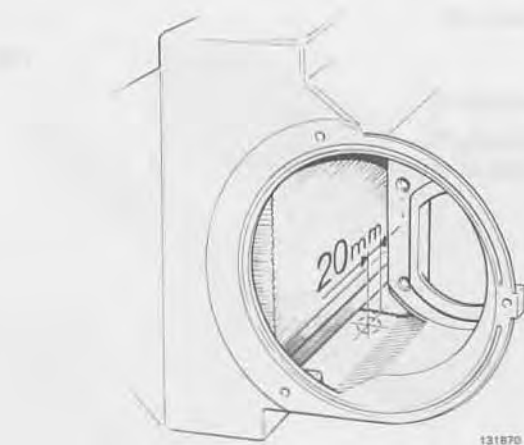
**Drill a 16 mm = 0.63" hole in the bottom left side of the heater housing, 20 mm = 0.79" from the outer edge of the housing.**

Drill from the inside with a 90° drill adapter or from underneath by using a long drill bit and holding the drill against the transmission tunnel. A clean, round hole is needed otherwise condensation could leak if the vehicle is equipped with air conditioning. Remove all loose drilling debris.

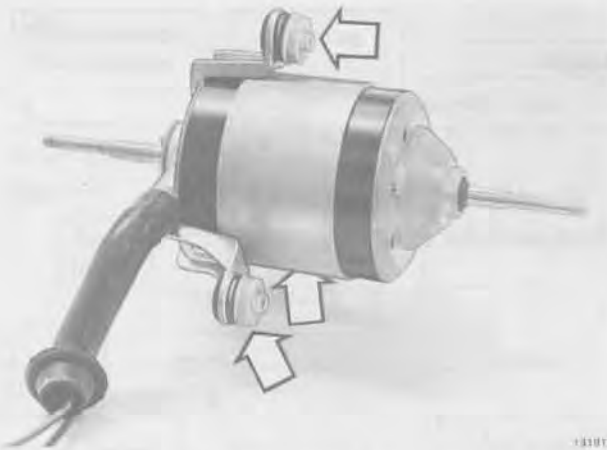
N15

**Mark up cable locations on the new switch connector. Disconnect the cables.**

There is one part of the wiring plug for the heater fan switch which is not used. When ground off, the complete plug will pass through the existing hole in the top of the heater housing.



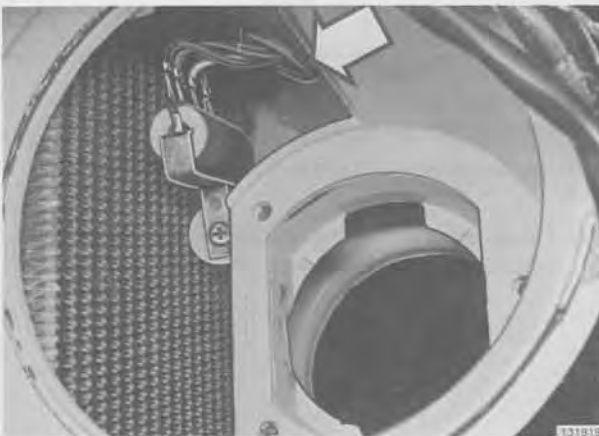




131818

N16

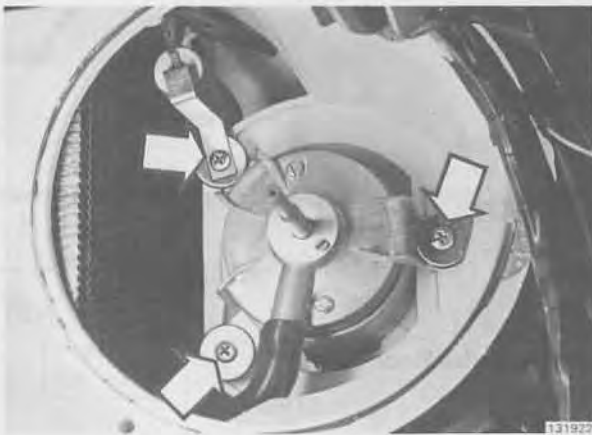
Install plastic bushings as illustrated. If not installed the fan wheels may contact the casings.



131819

N17

Pass the cables for the resistor through the upper hole in the heater housing. Fit the rubber grommet



131922

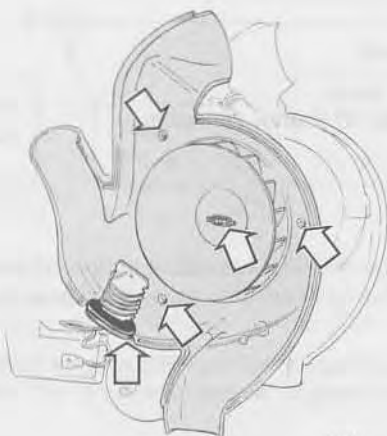
N18

#### Install the motor

Use the screws and washers in the installation kit.

Insert the cables and casing through the drilled hole in the bottom of the heater housing.

**Note:** Take care not to crease or restrict the cable casing, since air for fan motor ventilation flows along it.



131871

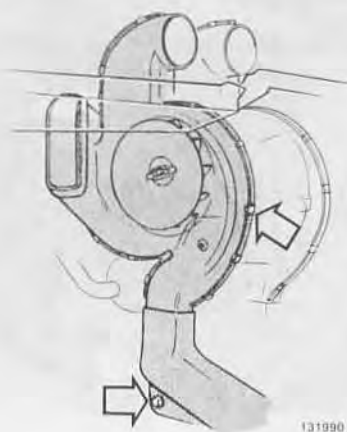
N19

#### Install:

- inner fan casing
- control valve capillary tube in inner fan casing
- fan wheel.

N20

Connect hose to rear floor shutter actuator



131990

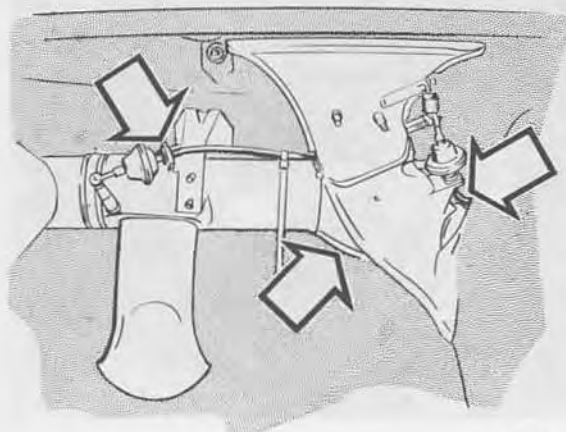
**Install:**

- outer fan casing
- air duct for rear floor.

N21

N22

**Fold back the floor carpet**



131868

**Connect:**

- air ducts
- hoses to shutter actuators.

N23

*Right-hand side*

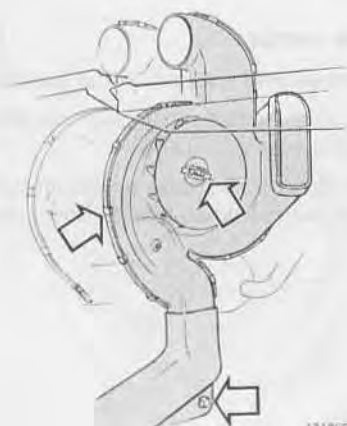
N24

**Install:**

- fan wheel
- outer fan casing
- the support under the glove compartment (if removed)
- air duct for rear floor.

N25

**Fold back the floor carpet**

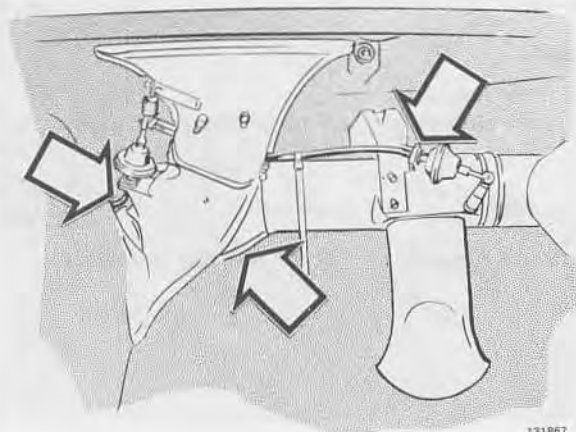


131865

N26

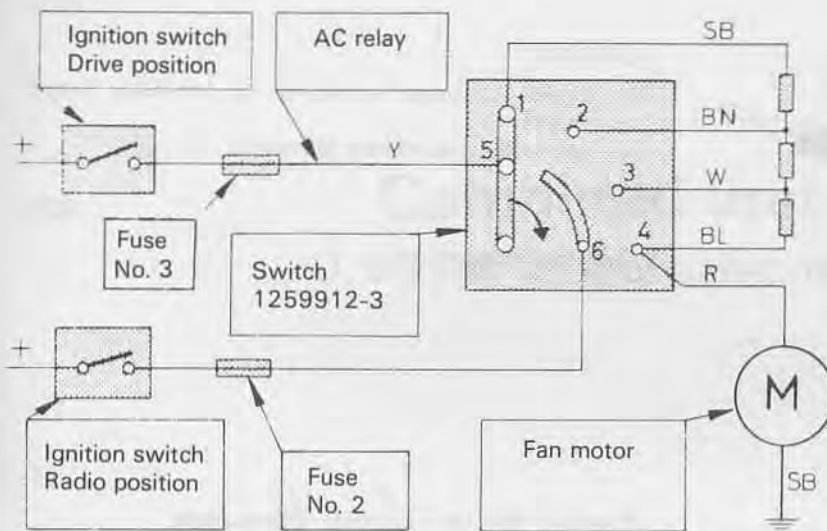
**Connect:**

- air ducts
- hose to shutter actuators.



131867

N27

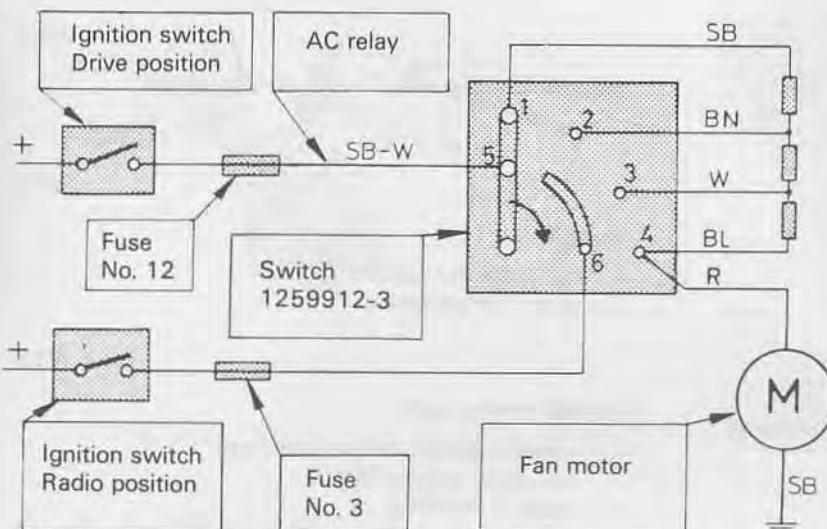
**Connecting the fan motor**

**Vehicles built up to and including 1978:**

Move the existing yellow cable from fuse 2 to fuse 3 and connect it to terminal 5 on the switch connector.

Use a new cable and connect it from fuse 2 to terminal 6 on the connector. Connect the AC relay on the cable between fuse 3 and terminal 5 on the switch connector. Use a Scotch-lock type of plug.

1. **Ignition switch in drive position:** All the fan speeds (1-4) can be used but it is not possible to switch the fan off.
2. **Ignition switch in radio position:** The fan speeds 2-4 can be used. The fan is switched off in position 1.

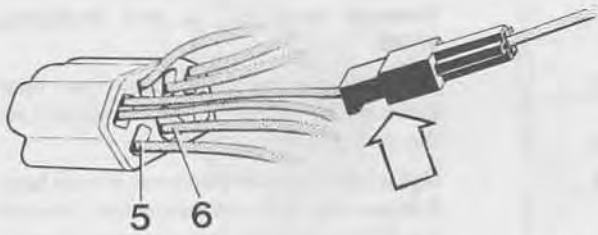
**Vehicles built 1979-1980**

Move the existing black/white cable from fuse 3 to fuse 12 and connect it to terminal 5 on the switch connector.

**Note:** It may be necessary to extend this cable. Use a new cable and connect it from fuse 3 to terminal 6 on the connector.

Connect the AC relay on the cable between fuse 12 and terminal 5 on the switch connector. Use a Scotch-lock type of plug.

1. **Ignition switch in drive position:** All the fan speeds (1-4) can be used but it is not possible to switch the fan off.
2. **Ignition switch in radio position:** The fan speeds 2-4 can be used. The fan is switched off in position 1.



131967

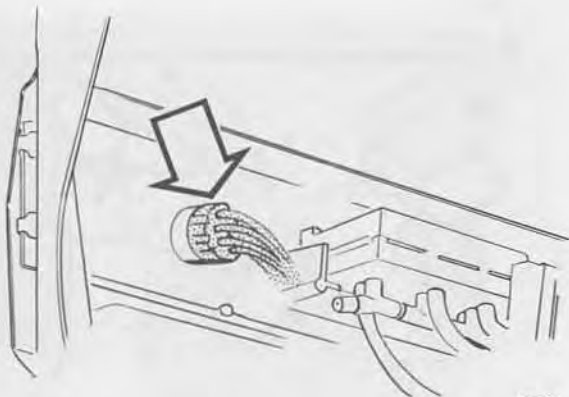
#### Connect:

- cables to plugs according to previously made marks
- fan motor ground lead to bracket.

N28

N29

#### Join the connectors



131863

#### Connect the connector to the switch

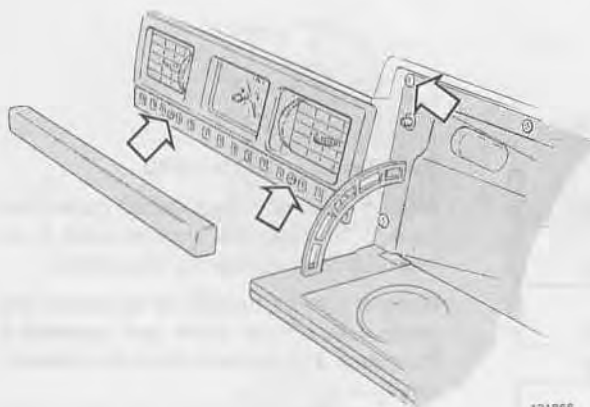
N30

N31

#### Fit:

- the switch to the central console
- the switch knob.

Now test the operation of the fan motor



131866

#### Connect the air ducts for the centre air vents.

N32

N33

#### Reconnect the elec. leads to the clock

N34

#### Install:

- air vents and padding
- glove compartment.

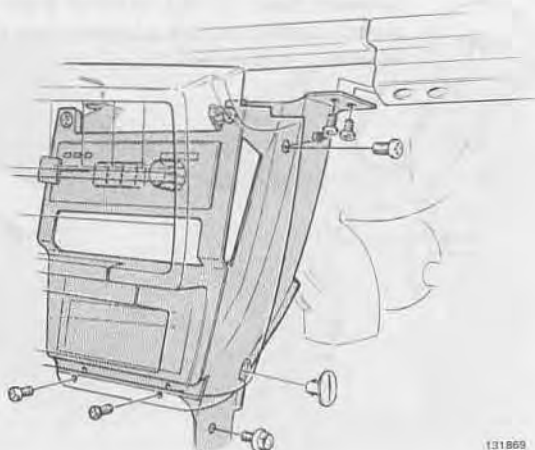
N35

#### Install or connect:

- central console and control panel
- fan motor ground lead
- radio (if installed)
- side panels and soundproofing on both sides of central console.

N36

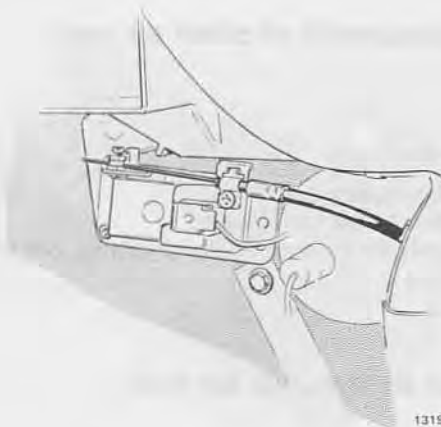
#### Reconnect the battery ground lead.



131869

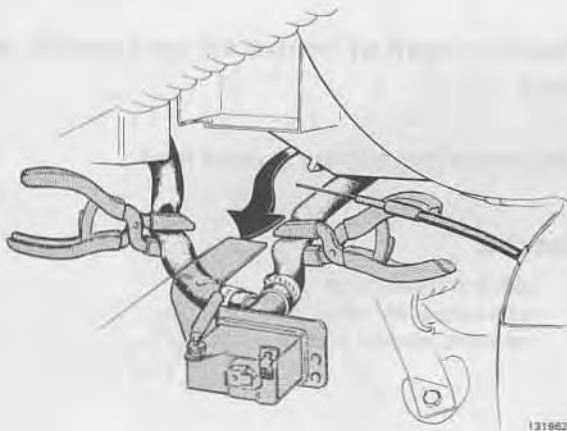
## Combined unit (CU)

### O. Heater control valve, replacement



01

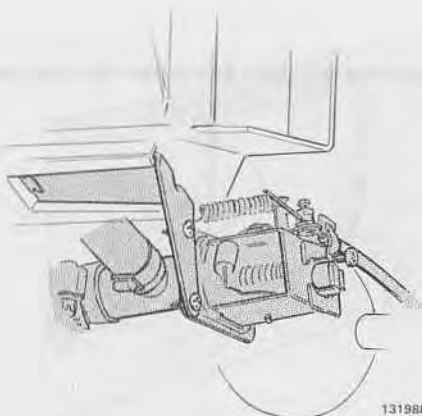
Remove the soundproofing and side panels on left-hand side of central console



03

Pull out the control valve from the mounting

Attach hose pliers to the inlet and outlet hoses. Disconnect the hoses.



04

Transfer the bracket to the new control valve

05

Connect the hoses. Detach the hose pliers

06

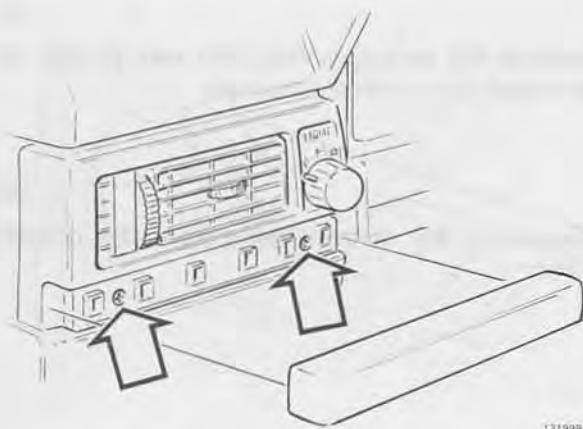
Install or connect:

- the control valve
- the control cable. Adjust the cable
- soundproofing and side panels.



## Air distribution

P. 1975-1980



### Replacement of outer air vent

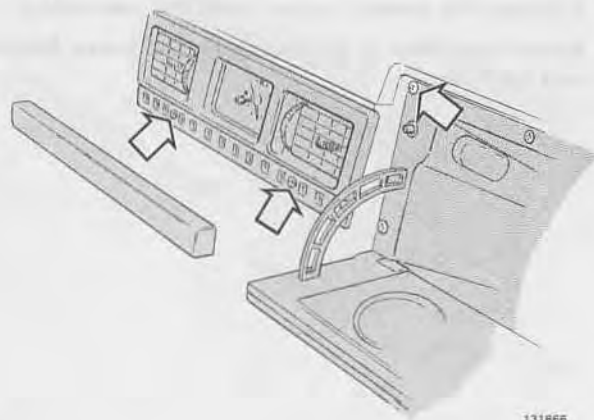
P1

#### Remove:

- light switch knob
- strip below the air vent
- both the air vent retaining screws. Remove the air vent.

P2

Install air vent, strip and knob.



### Replacement of centre air vent and/or air duct

#### Disconnect the battery ground lead

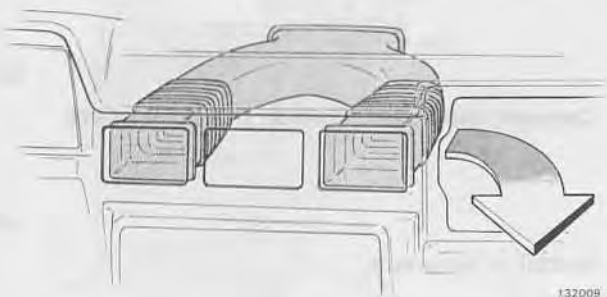
P3

#### Remove:

- glove compartment
- strip below air vents
- retaining screws and air vents.

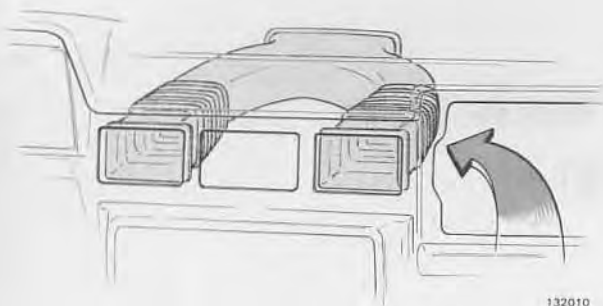
P4

Remove the air duct between the heater and air vents.



P5

### Install the air duct



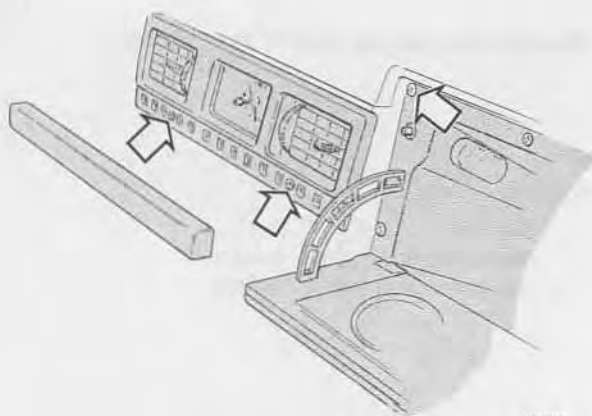
132010

P6

### Install:

- air vents
- strip below air vents
- glove compartment

Reconnect the battery ground lead.



131866

### Rear floor air duct, replacement

*Push seat as far forward as possible*

P7

Unscrew the retaining screws on the rear duct and remove the duct

P8

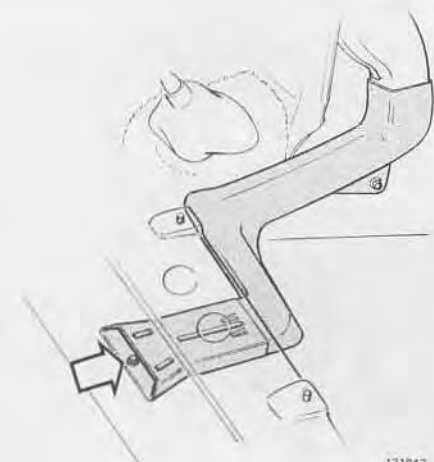
### Install the new duct

*Move the front seat back to its rearmost position*

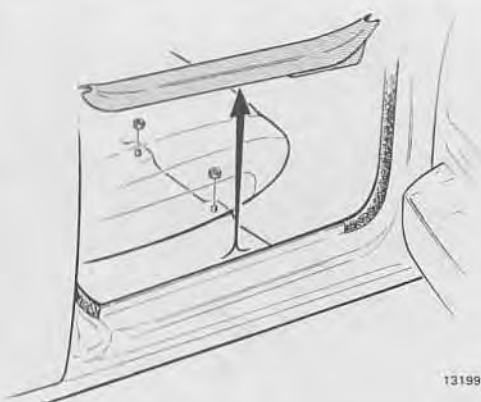
P9

### Remove:

- soundproofing and side panel
- front retaining nuts for front seat. Lift the seat backwards slightly
- door sill
- floor carpet retainers. Move carpet to one side.

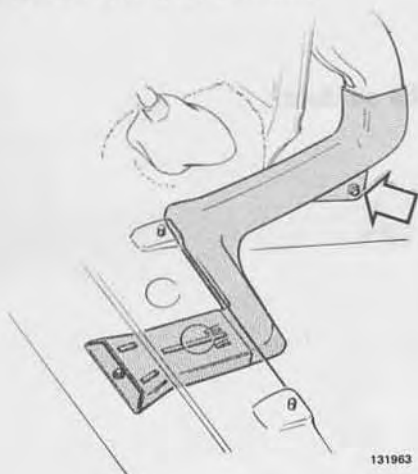


131842



131998

Air duct to rear floor, replacement

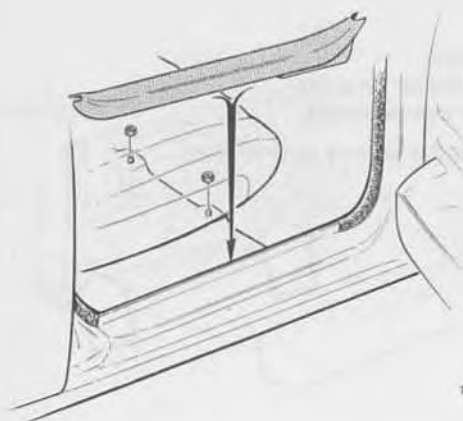


Remove the front air duct

P10

Install the new duct

P11



Position the carpet and fit the retainers

P12

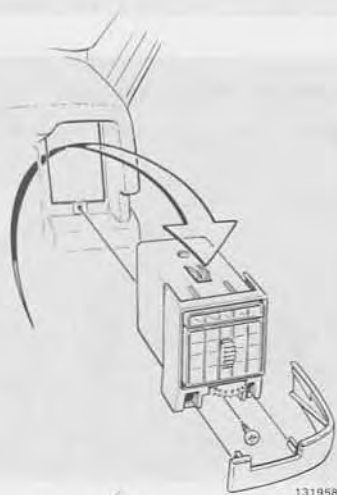
Install:

- door sill
- front retaining nuts for front seat
- side panel and soundproofing.

P13

## Air distribution

R. 1981–



131958

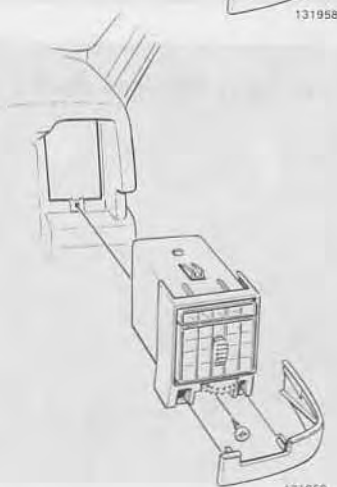
### Outer air vent, replacement

R1

**Remove the strip under the vent**

Carefully pry off with a screwdriver.

**Remove the retaining screw and push down the clip on top of the vent. Remove the vent**

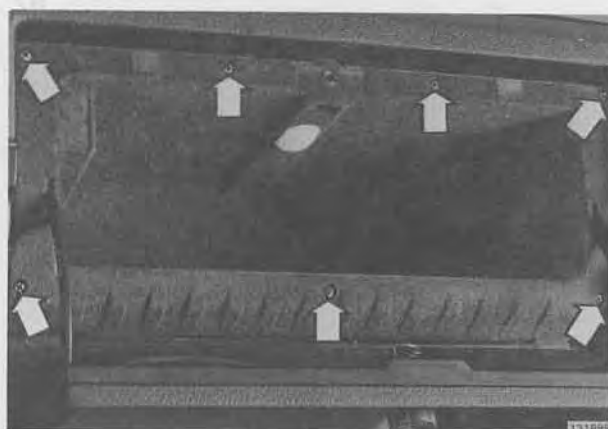


131959

R2

**Press in the new vent and tighten the screw**

Refit the strip under the vent.



131889

### Centre air vent and/or duct, replacement

**Disconnect the battery ground lead**

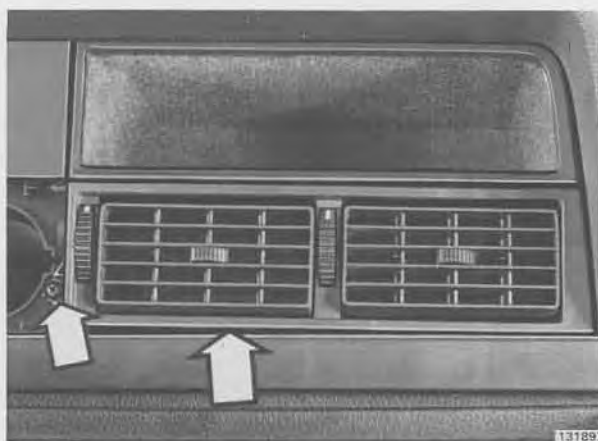
R3

**Remove the glove compartment**



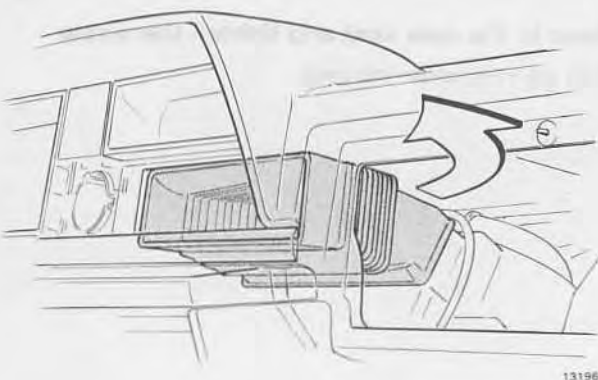
Remove the extra instrument cover panel

R4



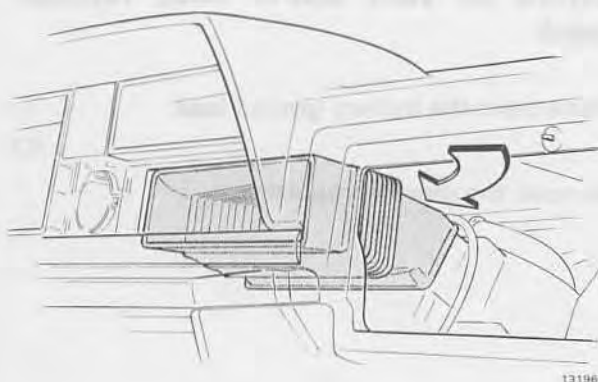
Remove the rim of the air vents  
Remove the retaining screws and pull out the vents

R5



Remove the air duct between the heater and air vents

R6



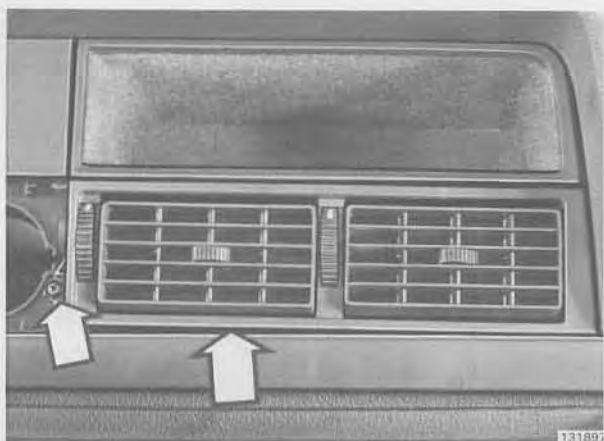
Install the air duct

R7



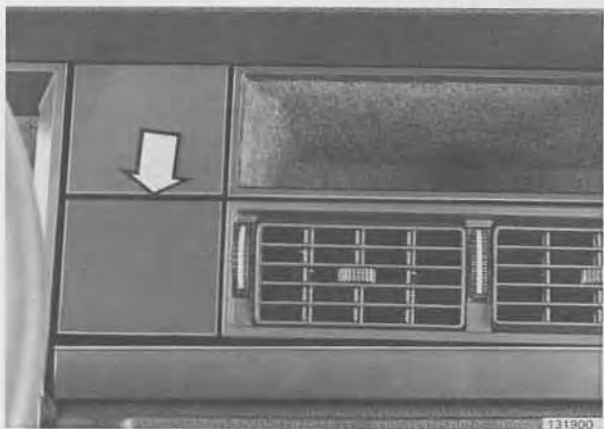
R8

Install the air vents and rim



R9

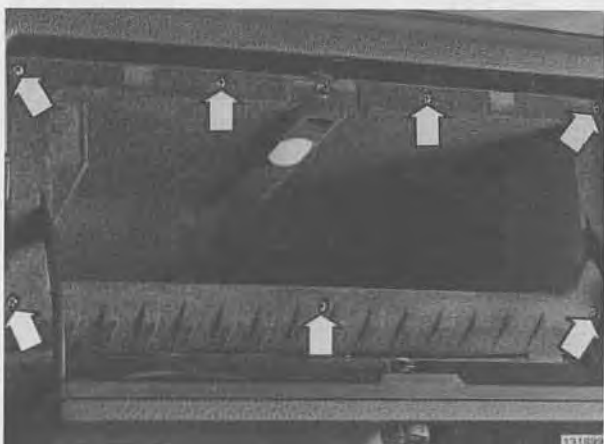
Install extra instrument cover



R10

Reinstall the glove compartment

Reconnect the battery ground lead



Rear floor air duct, replacement

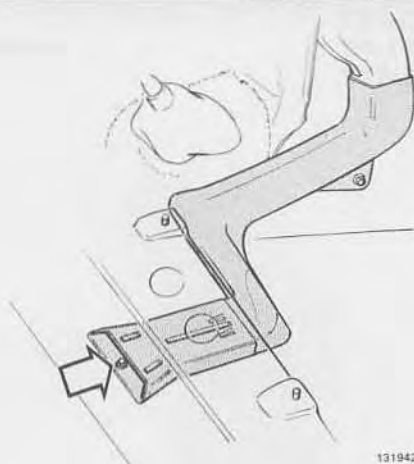
*Push the front seat as far forward as possible*

R11

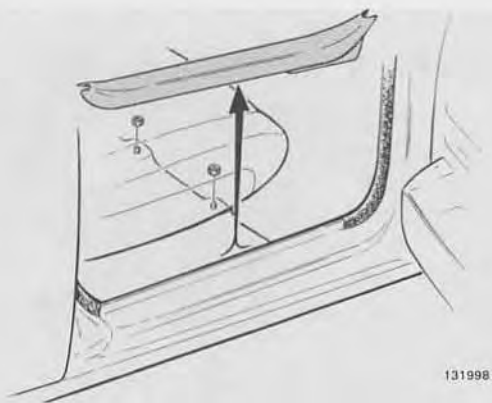
Remove the retaining screws at the rear of the duct and remove the duct

R12

Install the new duct



Rear floor air duct, replacement



Push the front seat as far to the rear as possible

R13

**Remove:**

- soundproofing and side panel
- front retaining nuts for front seat. Lift the seat backwards slightly.
- door sill
- floor carpet retainers. Fold back the carpet.

R14

**Remove the front air duct**

Remove the screw.

R15

**Install the new duct**

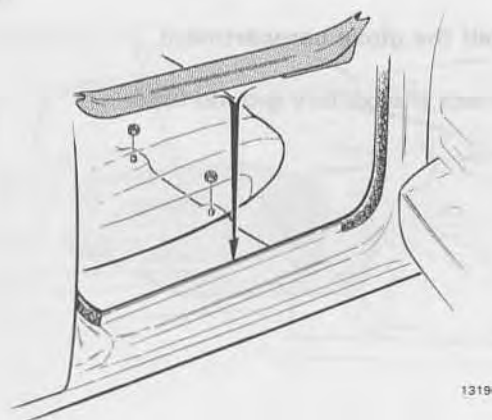
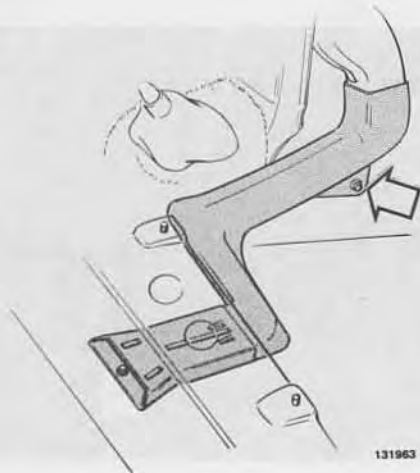
R16

**Position the carpet and fit the retainers**

R17

**Install:**

- door sill
- front retaining nuts for front seat
- side panel and soundproofing.



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## Air distribution 1975-1980

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### Centre air vent/air duct

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## Air distribution 1981-

### Air vents

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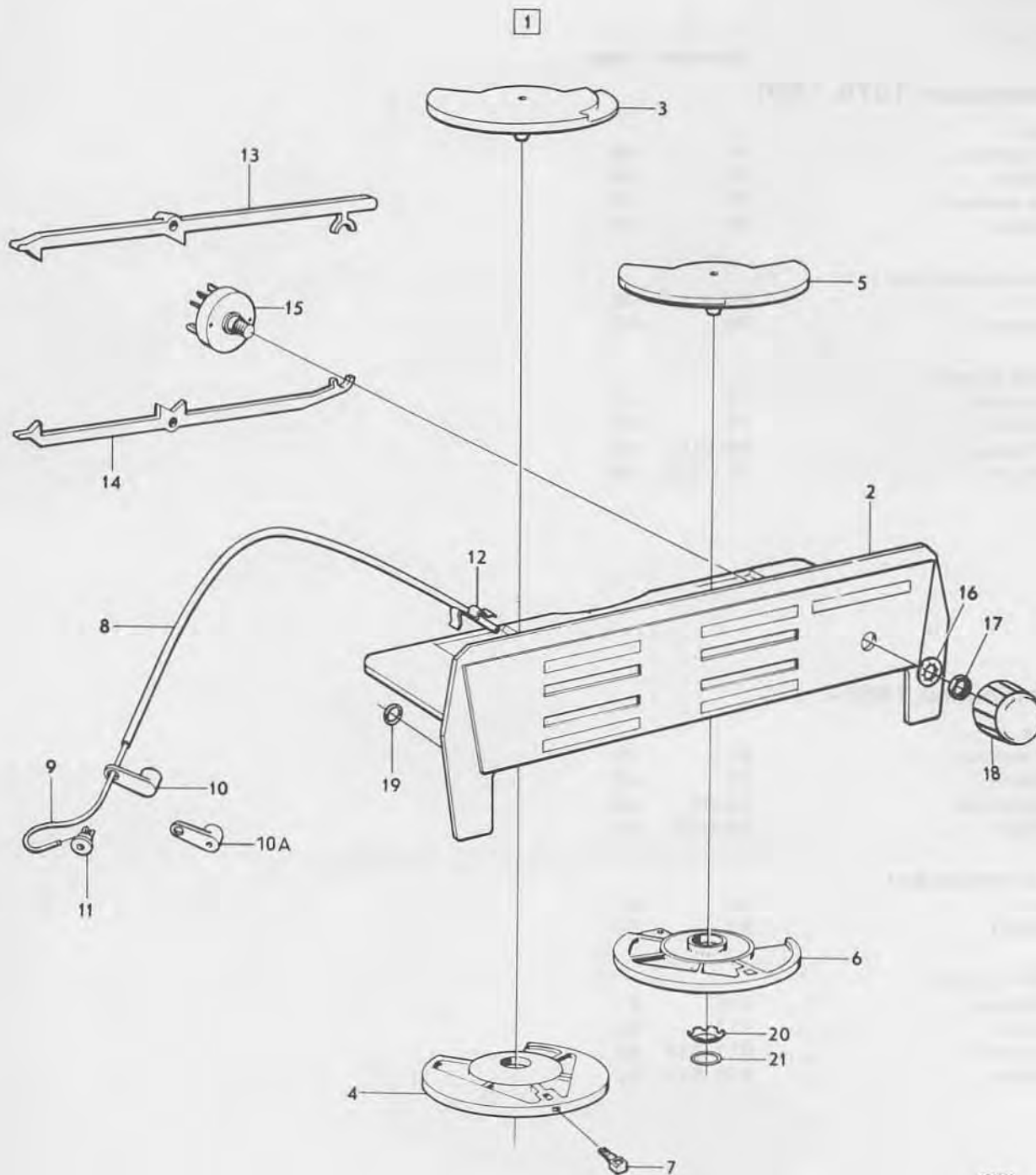
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### Rear floor air duct

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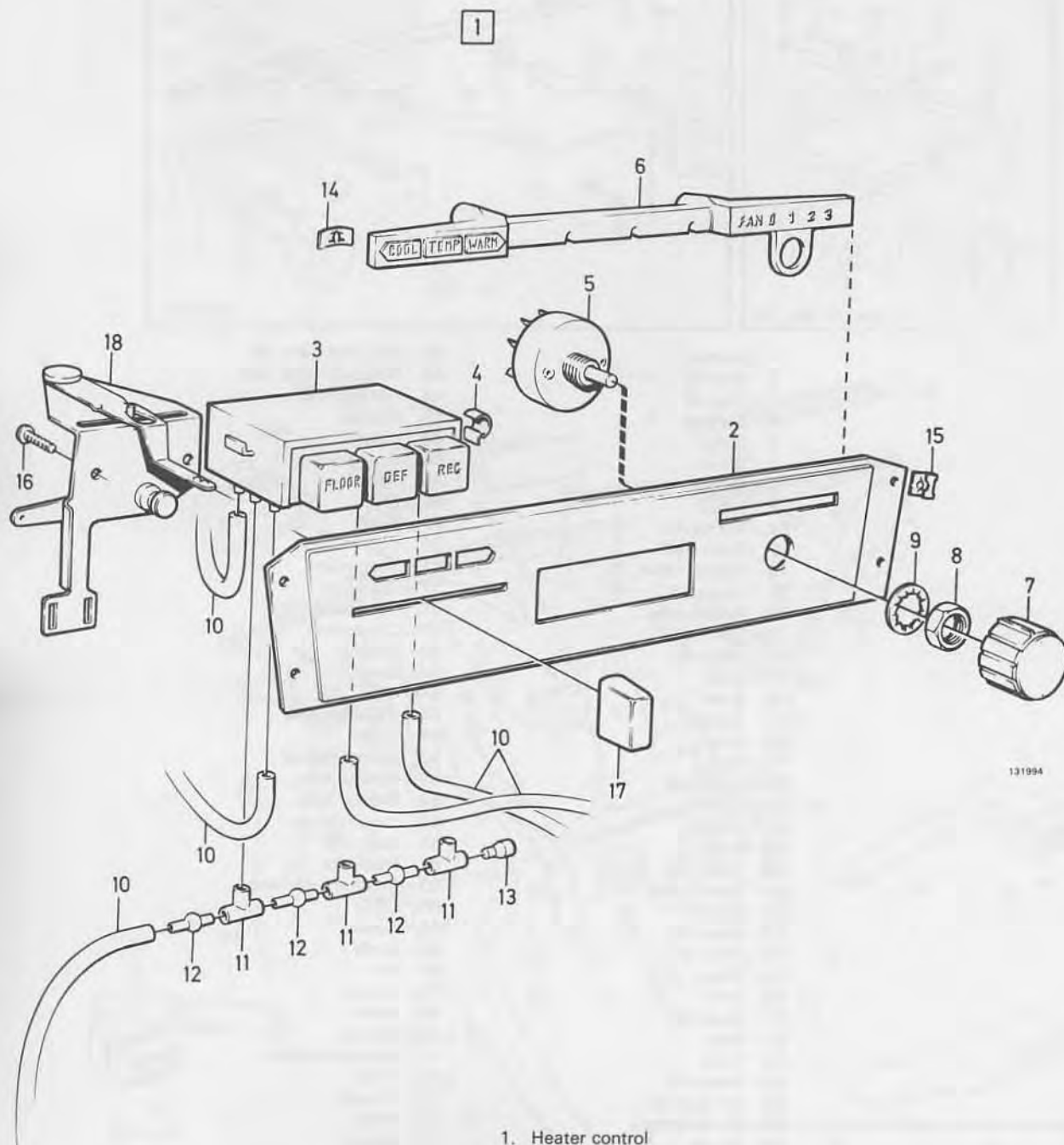




131993

- |                        |                       |
|------------------------|-----------------------|
| 1. Heater control      | 12. Clip              |
| 2. Control panel       | 13. Light distributor |
| 3. TEMP control disc   | 14. Light distributor |
| 4. AIRMIX control disc | 15. Fan switch        |
| 5. DEF control disc    | 16. Washer            |
| 6. FLOOR control disc  | 17. Nut               |
| 7. Knob                | 18. Knob              |
| 8. Sheath              | 19. Washer            |
| 9. Cable               | 20. Spring washer     |
| 10. Crank              | 21. Washer            |
| 11. Cable holder       |                       |

**Chart A. Heater controls, standard unit**



131994

1. Heater control
2. Panel
3. Control
4. Clip
5. Switch
6. Light distributor
7. Knob
8. Nut
9. Washer
10. Hose
11. T-junction
12. Nipple
13. Plug
13. Clip
14. Clip
15. Spring nut
16. Screw
17. Knob
18. Control bracket

**Chart B. Heater controls, CU**

1. Heater
2. Screw
3. Washer
4. Bracket
5. Screw
6. Screw
7. Screw
8. Nut
- 8a. Spring nut
9. Drain pipe
10. Control valve
11. Nipple
12. Return pipe
13. Seal ring
14. Hose clip
15. Hose
16. Hose
17. Screw
18. Screw
19. Nut
20. Grommet
21. Screw
22. Washer
23. Hose
24. Hose clip
25. Return pipe
26. Hose
27. Hose clip
28. Hose clip
29. Nipple
30. Hose
31. Hose clip
32. Pipe
33. Hose
34. Hose clip
35. Air duct, left
36. Air duct, right
37. Air jet
38. Screw
39. Washer
40. Screw
41. Washer
42. Defroster tube, left
43. Defroster tube, right
44. Defroster jet
45. Bracket
46. Screw
47. Spring nut
48. Frame
49. Clip
- 49a. Stud
50. Pipe
51. Connection
52. Clamp
53. Connection
- 53a. Connection
54. Grating
- 54a. Cover
- 54b. Clip
55. Valve housing
56. Knob
57. Heater control
58. Rubber hose
59. Rubber hose
60. T-connection
61. Hose clip
62. Hose clip
63. Intermediate flange
64. Lid
65. Gasket
66. Knob
67. Pin
68. Screw
69. Hose
70. Clamp
71. Connecting pipe
72. Hose
73. Clamp
74. Hose
75. Nipple
76. O-ring
77. Screw
78. Spring nut

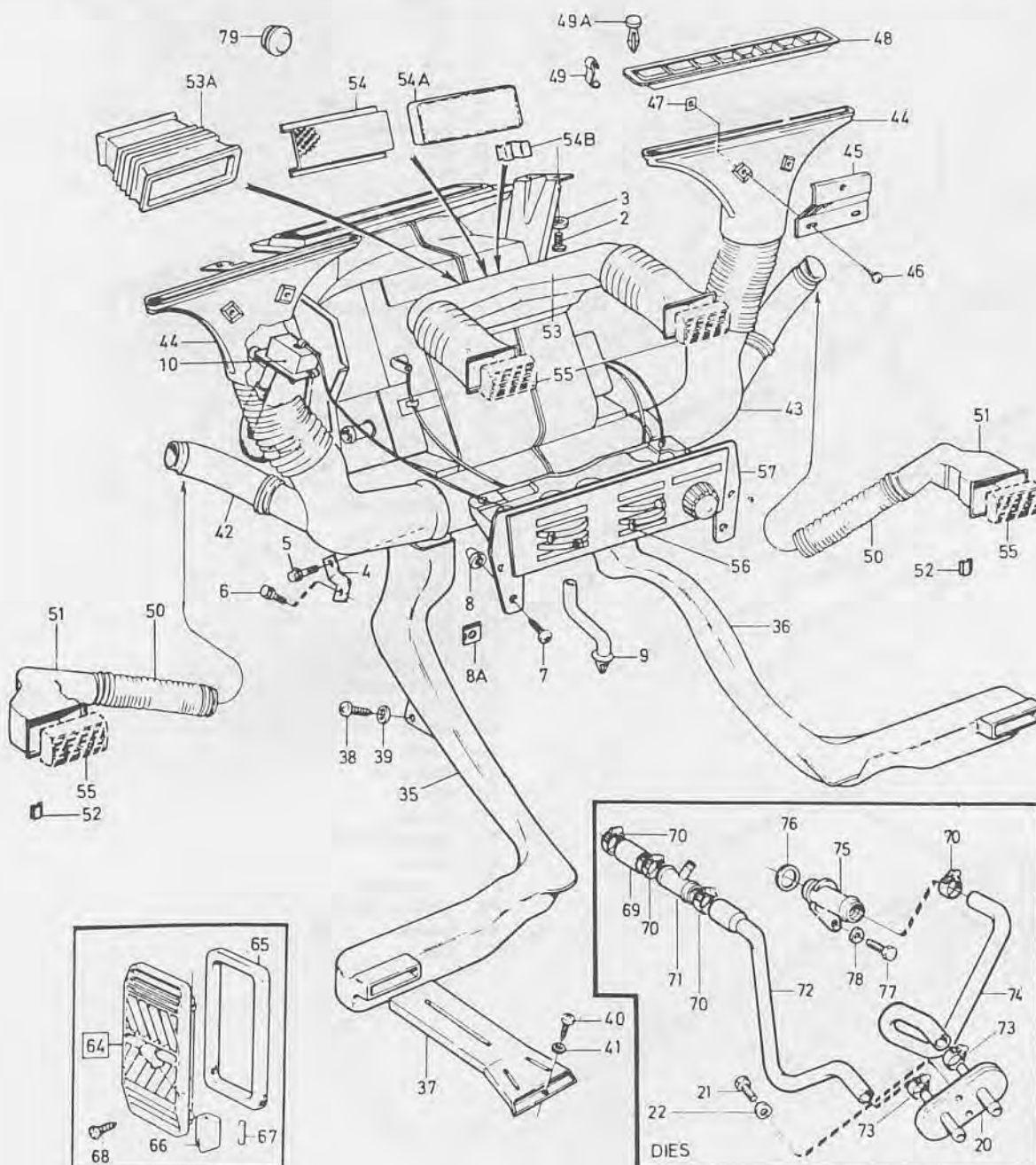
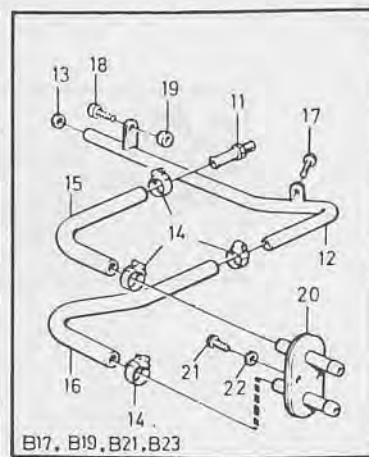
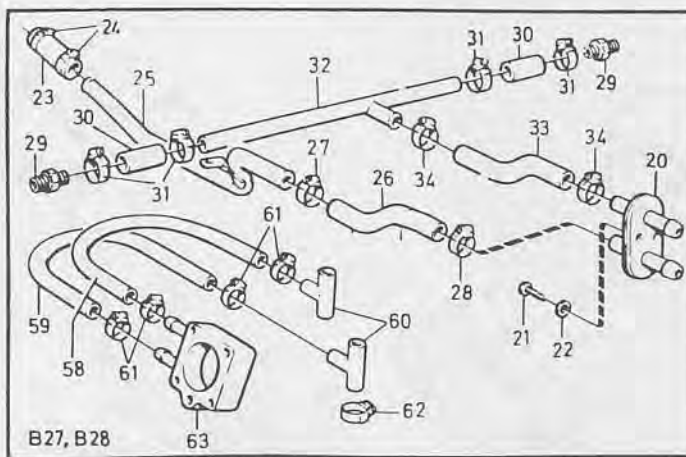


Chart C. Standard heater unit



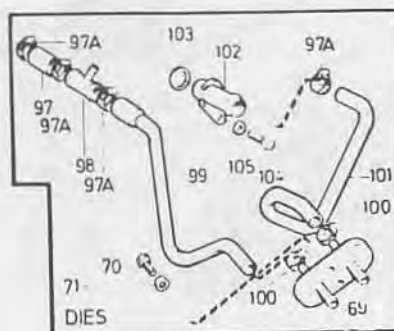
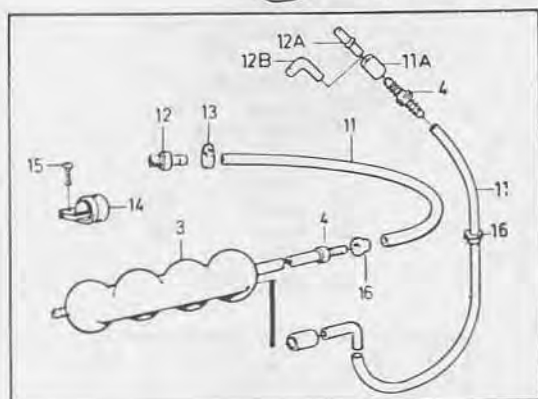
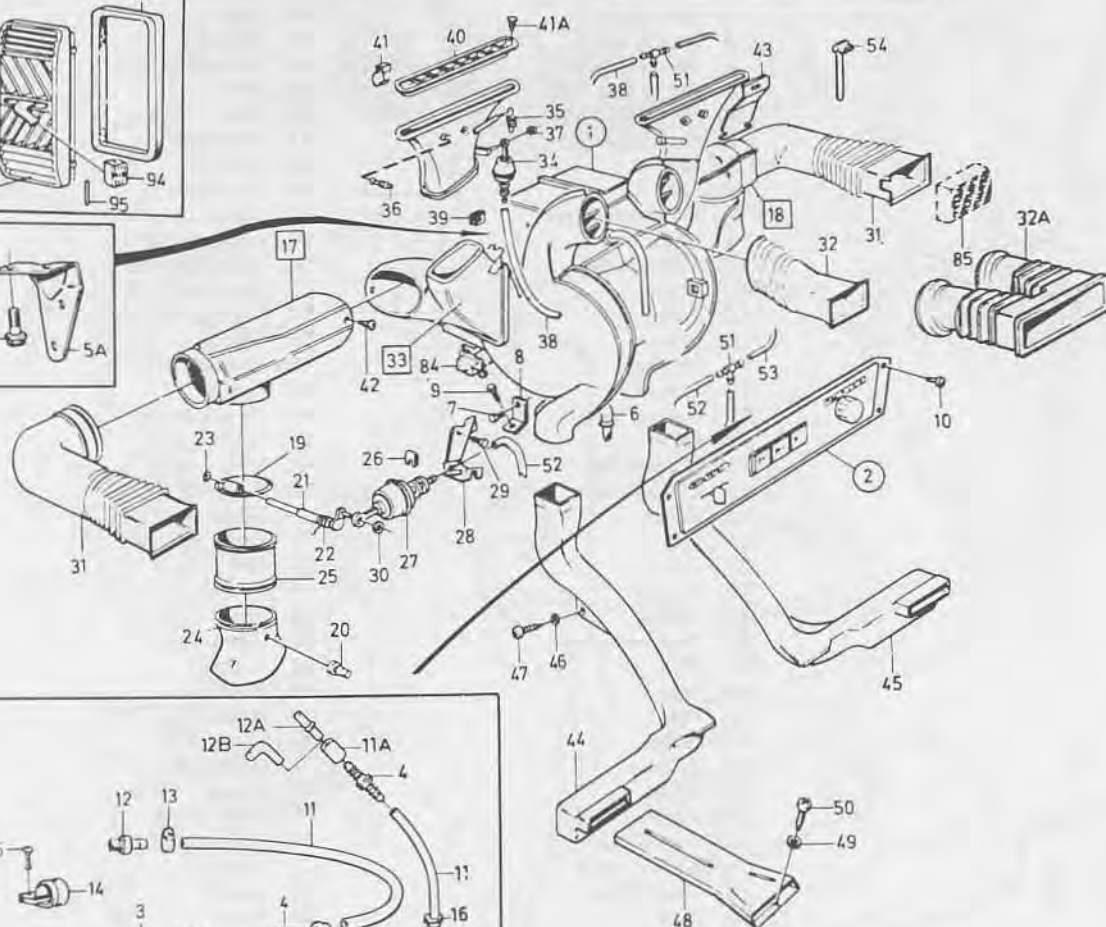
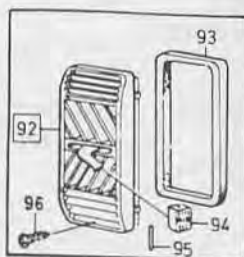
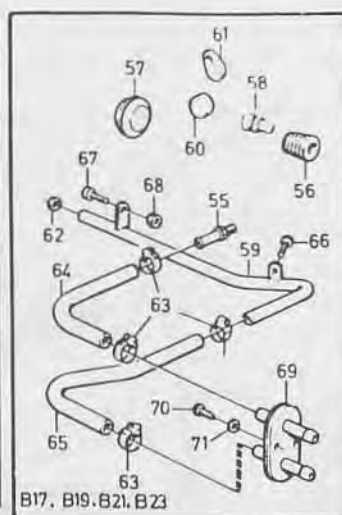
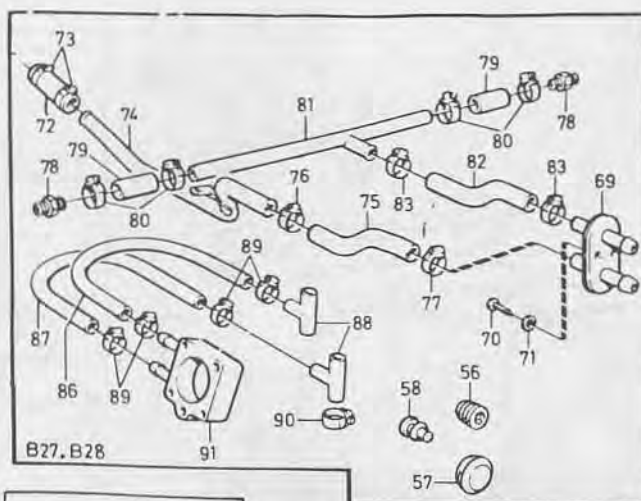
1. Heater
2. Casing
3. Clip
4. Fan
5. Motor
6. Carbon brush kit
7. Fan wheel
8. Flap
9. Pad
10. Screw
11. Gasket
12. Shutter, floor
13. Shutter, defroster
15. Catch washer
16. Heat exchanger
17. Gasket
18. Seal ring
19. Clip
20. Air distributor, left
21. Air distributor, right
22. Control valve
23. Clamp
24. Screw
25. Capillary holder
26. Hose
27. Hose
28. Hose
29. Grommet
30. Spacer
31. Hose clamp
32. Bracket, left
33. Bracket, right
34. Screw
35. Screw
36. Screw
37. Spring nut
38. Flat pin
39. Washer
40. Heater control
41. Screw
42. Clamp, left
43. Clamp, right
44. Gasket
45. Clip







1. Heater
2. Heater control
3. Vacuum tank
4. Check valve
5. Screw
- 5a. Bracket
6. Drain pipe
7. Screw
8. Bracket
9. Screw
10. Screw
11. Hose
- 11a. Hose
12. Nipple
- 12a. Nipple
- 12b. Connecting pipe
13. Hose clip
14. Clamp
15. Screw
16. Rubber bush
17. Valve housing
18. Valve housing
19. Valve
20. Lock plug
21. Shaft
22. Spring
23. Spring washer
24. Jet
25. Intermediate tube
26. Clip
27. Shutter actuator
28. Bracket
29. Screw
30. Catch washer
31. Tube
32. Joint
- 32a. Joint
33. Defroster vent
34. Shutter actuator
35. Return spring
36. Lock plug
37. Catch washer
38. Hose
39. Clip
40. Frame
41. Clip
- 41a. Plug, black
42. Screw
43. Bracket
44. Air duct, left
45. Air duct, right
46. Washer
47. Screw
48. Air vent
49. Washer
50. Screw
51. T-pipe
52. Hose
53. Hose
54. Clamp
55. Nipple
56. Plug
57. Plug
58. Lock plug
59. Return pipe
60. Plug
61. Lock washer
62. Seal ring
63. Hose clamp
64. Hose
65. Hose
66. Screw
67. Screw
68. Nut
69. Grommet
70. Screw
71. Washer
72. Hose
73. Hose clamp
74. Return pipe
75. Hose
76. Hose clamp
77. Hose clamp
78. Nipple
79. Hose
80. Hose clamp
81. Pipe
82. Hose
83. Hose clamp
84. Check valve
85. Valve housing
86. Rubber hose
87. Rubber hose
88. T-connection
89. Hose clamp
90. Hose clamp
91. Intermediate flange
92. Lid
93. Gasket
94. Knob
95. Pin
96. Screw
97. Hose
- 97a. Clamp
98. Connecting pipe
99. Hose
100. Clamp
101. Hose
102. Nipple
103. O-ring
104. Screw
105. Spring washer



132008

Chart E. Combined heater unit

- 
1. Heater
  2. Heater control
  3. Casing left
  4. Casing, right
  5. Fan casing, left
  6. Fan casing, right
  7. Shutter actuator
  8. Thrust spring
  9. Link
  10. Lid
  11. Shutter actuator
  12. Clip
  13. Control valve
  14. Clamp
  15. Screw
  16. Bush
  17. Bracket
  18. Screw
  19. Control cable
  20. Clip
  21. Bracket, left
  22. Bracket, right
  23. Screw
  24. Clip
  25. Clip
  26. Gasket
  27. Gasket
  28. Heat exchanger
  29. Pipe
  30. Pipe
  30. Pipe
  31. Screw
  32. Bracket
  33. Hose
  - 33a. Joint
  - 33b. Pipe elbow
  34. Vacuum tank
  35. Check valve
  36. Joint
  37. Pipe
  38. Spring
  39. Lock washer
  40. Motor
  41. Carbon brush kit
  42. Bush
  43. Motor
  44. Insulator
  45. Screw
  46. Nut
  47. Resistance
  48. Bush
  49. Insulator
  50. Cable
  51. Insulator
  52. Cable terminal
  53. Fan wheel, left
  54. Clamp
  55. Screw
  - 55a. Washer
  56. Cover
  57. Return spring
  58. Lock washer
  59. Lock washer
  60. Shutter
  61. Screw
  62. Clip
  63. Clip
  64. Gasket
  65. Hose
  66. Clamp
  67. T-pipe
  68. Hose
  69. Hose
  70. Hose
  71. Grommet
  72. Spacer
  73. Hose clamp
  74. Thermostat
  75. Bracket
  76. Clamp
  77. Screw
  78. Hose
  79. Hose

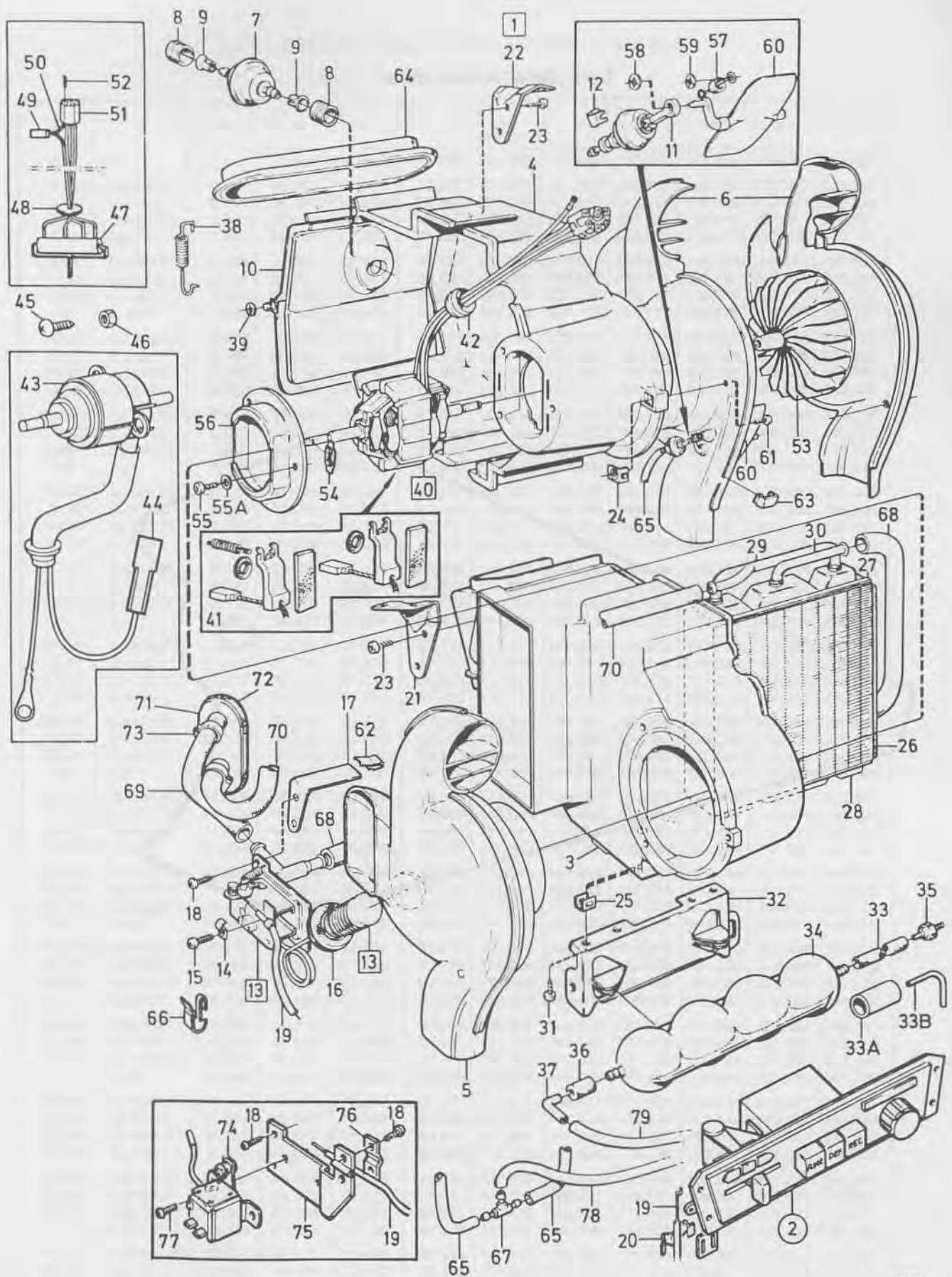
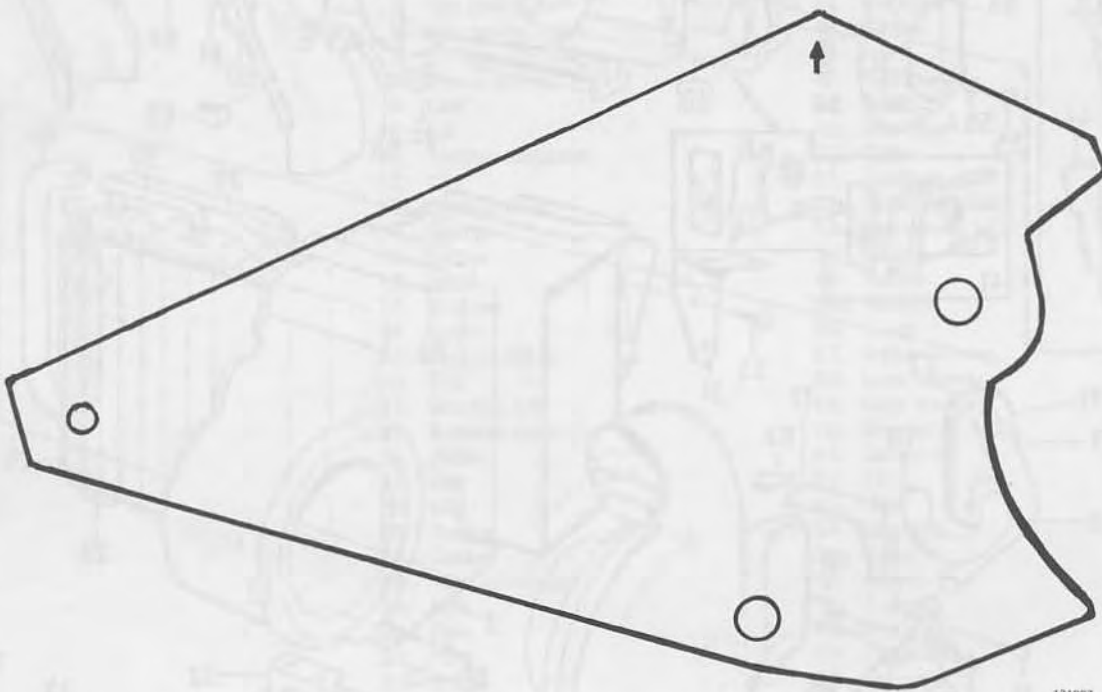


Chart F. Heater housing, CU



Template, actual size



131997

Chart G. Hole template, standard unit

# CONVERSION TABLE INCHES TO MILLIMETER

Values rounded from 1/64" to 10"

Inch		0"	1"	2"	3"	4"	5"	6"	7"	8"	9"
0"	0"	Millimeter									
1/64"	0,015625"	0,397	25,797	51,197	76,597	101,997	127,397	152,797	178,197	203,597	228,997
1/32"	0,03125"	0,794	26,194	51,594	76,994	102,394	127,794	153,194	178,594	203,994	229,394
3/64"	0,046875"	1,191	26,591	51,991	77,391	102,791	128,191	153,591	178,991	204,391	229,791
1/16"	0,0625"	1,588	26,988	52,388	77,788	103,188	128,588	153,988	179,388	204,788	230,188
5/64"	0,078125"	1,984	27,384	52,784	78,184	103,584	128,984	154,384	179,784	205,184	230,584
3/32"	0,09375"	2,381	27,781	53,181	78,581	103,981	129,381	154,781	180,181	205,581	230,981
7/64"	0,109375"	2,778	28,178	53,578	78,978	104,378	129,778	155,178	180,578	205,978	231,378
1/8"	0,125"	3,175	28,575	53,975	79,375	104,775	130,175	155,575	180,975	206,375	231,775
9/64"	0,140625"	3,572	28,972	54,372	79,772	105,172	130,572	155,972	181,372	206,772	232,172
5/32"	0,15625"	3,969	29,369	54,769	80,169	105,569	130,969	156,369	181,769	207,169	232,569
11/64"	0,171875"	4,366	29,766	55,166	80,566	105,966	131,366	156,766	182,166	207,566	232,966
3/16"	0,1875"	4,762	30,162	55,562	80,962	106,362	131,762	157,162	182,562	207,962	233,362
13/64"	0,203125"	5,159	30,559	55,959	81,359	106,759	132,159	157,559	182,959	208,359	233,759
7/32"	0,21875"	5,556	30,956	56,356	81,756	107,156	132,556	157,956	183,356	208,756	234,156
15/64"	0,234375"	5,953	31,353	56,753	82,153	107,553	132,953	158,353	183,753	209,153	234,553
1/4"	0,25"	6,350	31,750	57,150	82,550	107,950	133,350	158,750	184,150	209,550	234,950
17/64"	0,265625"	6,747	32,147	57,547	82,947	108,347	133,747	159,147	184,547	209,947	235,347
9/32"	0,28125"	7,144	32,544	57,944	83,344	108,744	134,144	159,544	184,944	210,344	235,744
19/64"	0,296875"	7,541	32,941	58,341	83,741	109,141	134,541	159,941	185,341	210,741	236,141
5/16"	0,3125"	7,938	33,338	58,738	84,138	109,538	134,938	160,338	185,738	211,138	236,538
21/64"	0,328125"	8,334	33,734	59,134	84,534	109,934	135,334	160,734	186,134	211,534	236,934
11/32"	0,34375"	8,731	34,131	59,531	84,931	110,331	135,731	161,131	186,531	211,931	237,331
23/64"	0,359375"	9,128	34,528	59,928	85,328	110,728	136,128	161,528	186,928	212,328	237,728
3/8"	0,375"	9,525	34,925	60,325	85,725	111,125	136,525	161,925	187,325	212,725	238,125
25/64"	0,390625"	9,922	35,322	60,722	86,122	111,522	136,922	162,322	187,722	213,122	238,522
13/32"	0,40625"	10,319	35,719	61,119	86,519	111,919	137,319	162,719	188,119	213,519	238,919
27/64"	0,421875"	10,716	36,116	61,516	86,916	112,316	137,716	163,116	188,516	213,916	239,316
7/16"	0,4375"	11,112	36,512	61,912	87,312	112,712	138,112	163,512	188,912	214,312	239,712
29/64"	0,453125"	11,509	36,909	62,309	87,709	113,109	138,509	163,909	189,309	214,709	240,109
15/32"	0,46875"	11,906	37,306	62,706	88,106	113,506	138,906	164,306	189,706	215,106	240,506
31/64"	0,484375"	12,303	37,703	63,103	88,503	113,903	139,303	164,703	190,103	215,503	240,903
1/2"	0,5"	12,700	38,100	63,500	88,900	114,300	139,700	165,100	190,500	215,900	241,300
33/64"	0,515625"	13,097	38,497	63,897	89,297	114,697	140,097	165,497	190,897	216,297	241,697
17/32"	0,53125"	13,494	38,894	64,294	89,694	115,094	140,494	165,894	191,294	216,694	242,094
35/64"	0,546875"	13,891	39,291	64,691	90,091	115,491	140,891	166,291	191,691	217,091	242,491
9/16"	0,5625"	14,288	39,688	65,088	90,488	115,888	141,288	166,688	192,088	217,488	242,888
37/64"	0,578125"	14,684	40,084	65,484	90,884	116,284	141,684	167,084	192,484	217,885	243,284
19/32"	0,59375"	15,081	40,481	65,881	91,281	116,681	142,081	167,481	192,881	218,281	243,681
39/64"	0,609375"	15,478	40,878	66,278	91,678	117,078	142,478	167,878	193,278	218,678	244,078
5/8"	0,625"	15,875	41,275	66,675	92,075	117,475	142,875	168,275	193,675	219,075	244,475
41/64"	0,640625"	16,272	41,672	67,072	92,472	117,872	143,272	168,672	194,072	219,472	244,872
21/32"	0,65625"	16,669	42,069	67,469	92,869	118,269	143,669	169,069	194,469	219,869	245,269
43/64"	0,671875"	17,066	42,466	67,866	93,266	118,666	144,066	169,466	194,866	220,266	245,666
11/16"	0,6875"	17,462	42,862	68,262	93,662	119,062	144,462	169,862	195,262	220,662	246,062
45/64"	0,703125"	17,859	43,259	68,659	94,059	119,459	144,859	170,259	195,659	221,059	246,459
23/32"	0,71875"	18,256	43,656	69,056	94,456	119,856	145,256	170,656	196,056	221,456	246,856
47/64"	0,734375"	18,653	44,053	69,453	94,853	120,253	145,653	171,053	196,453	221,853	247,253
3/4"	0,75"	19,050	44,450	69,850	95,250	120,650	146,050	171,450	196,850	222,250	247,650
49/64"	0,765625"	19,447	44,847	70,247	95,647	121,047	146,447	171,847	197,247	222,647	248,047
25/32"	0,78125"	19,844	45,244	70,644	96,044	121,444	146,844	172,244	197,644	223,044	248,444
51/64"	0,796875"	20,241	45,641	71,041	96,441	121,841	147,241	172,641	198,041	223,441	248,841
13/16"	0,8125"	20,638	46,038	71,438	96,838	122,238	147,638	173,038	198,438	223,838	249,238
53/64"	0,828125"	21,034	46,434	71,834	97,234	122,634	148,034	173,434	198,834	224,234	249,634
27/32"	0,84375"	21,431	46,831	72,231	97,631	123,031	148,431	173,831	199,231	224,631	250,031
55/64"	0,859375"	21,828	47,228	72,628	98,028	123,428	148,828	174,228	199,628	225,028	250,428
7/8"	0,875"	22,225	47,625	73,025	98,425	123,825	149,225	174,625	200,025	225,425	250,825
57/64"	0,890625"	22,622	48,022	73,422	98,822	124,222	149,622	175,022	200,422	225,822	251,222
29/32"	0,90625"	23,019	48,419	73,819	99,219	124,619	150,019	175,419	200,819	226,219	251,619
59/64"	0,921875"	23,416	48,816	74,216	99,616	125,016	150,416	175,816	201,216	226,616	252,016
15/16"	0,9375"	23,812	49,212	74,612	100,012	125,412	150,812	176,212	201,612	227,012	252,412
61/64"	0,953125"	24,209	49,609	75,009	100,409	125,809	151,209	176,609	202,009	227,409	252,809
31/32"	0,96875"	24,605	50,006	75,406	100,806	126,206	151,606	177,006	202,406	227,806	253,206
63/64"	0,984375"	25,003	50,403	75,803	101,203	126,603	152,003	177,403	202,803	228,203	253,603

## H. Conversion table





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